



**USAID**  
FROM THE AMERICAN PEOPLE

# Burundi

## Economic Performance Assessment



**August 2005**

This publication was produced by Nathan Associates Inc. for review by the United States Agency for International Development.



# Burundi

## Economic Performance Assessment

### **DISCLAIMER**

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

Sponsored by the Economic Growth office of USAID's Bureau of Economic Growth, Agriculture and Trade (EGAT), and implemented by Nathan Associates Inc. under Contract No. PCE-I-00-00-00013-00, Task Order 004, the Country Analytical Support (CAS) Project, 2004-2006, has developed a standard methodology for producing analytical reports to provide a clear and concise evaluation of economic growth performance in designated host countries. These reports are tailored to meet the needs of USAID missions and regional bureaus for country specific analysis. Each report contains:

- ? a synthesis of data drawn from numerous sources, including World Bank publications and other international data sets currently used by USAID for economic growth analysis, as well as accessible host-country data sources;
- ? international benchmarking to assess country performance in comparison to similar countries and groups of countries;
- ? an easy-to-read analytic narrative that highlights areas in which a country's performance is particularly strong or weak, thereby assisting in the identification of future programming priorities.

Under the CAS Project, Nathan Associates will also respond to mission requests for in-depth sector studies to examine more thoroughly particular issues identified by the data analysis in these country reports.

The authors of this report are Rose Mary Garcia, Julia Zislin, and Bruce Bolnick.

The CTO for this project is Yoon Lee. USAID missions and bureaus may seek assistance and funding for CAS studies by contacting Rita Aggarwal, USAID/EGAT/EG Activity Manager for the CAS project, at [raggarwal@usaid.gov](mailto:raggarwal@usaid.gov).

Electronic copies of reports and materials relating to the CAS project are available at [www.nathaninc.com](http://www.nathaninc.com). For further information or hard copies of CAS publications, please contact

Bruce Bolnick  
Chief of Party, CAS Project  
Nathan Associates Inc.  
[Bbolnick@nathaninc.com](mailto:Bbolnick@nathaninc.com)

# Contents

<b>Highlights of Burundi's performance</b>	<b>iii</b>
<b>Burundi: Notable Strengths and Weaknesses—Selected Indicators</b>	<b>iv</b>
<b>1. Introduction</b>	<b>1</b>
<b>2. Overview of the Economy</b>	<b>3</b>
Growth Performance	3
Poverty and Inequality	6
Economic Structure	7
Demography and Environment	8
Gender	10
<b>3. Private Sector–Enabling Environment</b>	<b>13</b>
Fiscal and Monetary Policy	13
Business Environment	15
Financial Sector	16
External Sector	18
Economic Infrastructure	22
<b>4. Pro-Poor Growth Environment</b>	<b>25</b>
Health	25
Education	27
Employment and Workforce	29
Agriculture	30
<b>Appendix. Indicator Criteria and Benchmarking Methodology</b>	

## Illustrations

### Figures

Figure 2-1. GDP Per Capita (current US\$)	4
Figure 2-2. Real GDP Growth (Percent)	5
Figure 2-3. Share of Gross Fixed Investment ( percent of GDP)	5
Figure 2-4. Investment Productivity (ICOR)	6
Figure 2-5. Population below Minimum Dietary Energy Consumption (percent)	7
Figure 2-6. Labor force and output structure, percent of GDP	8
Figure 2-7. Adult Literacy Rate	10
Figure 2-8. Male-to-Female Adult Literacy Ratio	11
Figure 3-1. Inflation Rate	14
Figure 3-2. Doing Business Composite Index	16
Figure 3-3. Cost to Create Collateral ( percent of per capita income)	17
Figure 3-4. Trade Ratio (Exports plus Imports as Percent of GDP)	19
Figure 3-5. Growth of Exports (Goods and Services)	20
Figure 3-6. Present Value of Debt (percent of GNI)	21
Figure 3-7. Aid (percent of Gross National Income)	22
Figure 4-1. HIV/AIDS Prevalence (percent)	26
Figure 4-2. Primary Education Expenditure (percent of GDP)	28
Figure 4-3. Labor Force Participation Rate (Total)	29
Figure 4-4. Agriculture Value Added per Worker (constant 1995 US\$)	31

### Tables

Table 1-1. Topic Coverage	2
---------------------------	---

## HIGHLIGHTS OF BURUNDI'S PERFORMANCE

<b>Economic Growth</b>	Following over a decade of conflict, Burundi has the lowest per capita income in the world. Recent growth has been too slow and erratic to improve living standards, and the investment rate is too low to support rapid growth.
<b>Poverty</b>	According to the latest household survey data for 2002, 68 percent of the people live in absolute poverty.
<b>Economic Structure</b>	The labor force is concentrated in subsistence farming; there is an urgent need to improve small farm productivity.
<b>Demography and Environment</b>	Burundi is a small country with very high population density. Recent political stabilization may result in a population boom that would strain existing systems, including environmental resources. In addition, adult literacy rates are low.
<b>Gender</b>	Gender inequity is a major impediment to economic development.
<b>Fiscal and Monetary Policy</b>	Inflation is moderate, but macroeconomic stability is precarious. Government expenditure soared to 42 percent of GDP in 2004, while revenue was below 20 percent of GDP; grants cover most of the difference.
<b>Business Environment</b>	To generate rapid growth, Burundi needs to establish an attractive investment climate. Yet Burundi is below average for sub-Saharan Africa on most indicators of the quality of the legal and regulatory environment.
<b>Financial Sector</b>	Considering the recent conflict, banking indicators such as credit to nongovernment, the degree of monetization, and real interest rates are relatively good compared to regional benchmarks.
<b>External Sector</b>	Burundi is making good progress with structural reforms, but the ratio of trade to GDP is unusually low, and barriers to global integration remain high. The high concentration of exports on coffee and tea creates vulnerability to fluctuations in yields and international prices.
<b>Economic Infrastructure</b>	Burundi's poor infrastructure is a serious impediment to growth. Some signs of recent improvement can be seen, such as rising Internet usage and telephone density, albeit from very low levels.
<b>Health</b>	Health conditions are poor, as reflected in a very low life expectancy and high prevalence of HIV/AIDS.
<b>Education</b>	Education levels are extremely low, though there are signs of improvement.
<b>Employment and Workforce</b>	Burundi has a very high rate of labor force participation, indicating that child labor is widespread and that every able person has to work.
<b>Agriculture</b>	Agriculture is performing very poorly even though it is the most critical sector of the economy.

Note: This table summarizes highlights of the performance evaluation, which is based primarily on comparative benchmarking, though absolute standards are also taken into account. The methodology is explained in the Appendix.

## BURUNDI: NOTABLE STRENGTHS AND WEAKNESSES— SELECTED INDICATORS<sup>a</sup>

Indicator, by Topic	Notable Strengths	Notable Weaknesses
<b>Growth Performance</b>		
Per capita GDP (PPP\$ and US\$)		✓
Real GDP growth (% change)		✓
<b>Poverty and Inequality</b>		
Poverty headcount, by national poverty line (%)		✓
<b>Demography and Environment</b>		
Adult literacy rate (%)		✓
<b>Gender</b>		
Adult literacy rate (ratio of male to female)		✓
<b>Fiscal and Monetary Policy</b>		
Government expenditure (% GDP)		✓
<b>Business Environment</b>		
Regulatory quality index		✓
<b>Financial Sector</b>		
Domestic credit to the private sector		✓
Real Interest rate	✓	
<b>External Sector</b>		
Trade (% of GDP)		✓
Concentration of exports		✓
<b>Economic Infrastructure</b>		
Telephone density (lines per 1,000 people)		✓
<b>Health</b>		
Access to improved water source (% population)	✓	
Child immunization rate (%)	✓	
Life expectancy at birth (years)		✓
Public health expenditure (% GDP)		✓
<b>Education</b>		
Net primary enrollment rate (%)		✓
Persistence in school to grade 5 (%)	✓	

<sup>a</sup> The chart identifies selective indicators for which Burundi's performance is particularly strong or weak relative to benchmarks; details are discussed in the text. The separate Data Supplement presents a full tabulation of the data examined for this report, including the international benchmark data, along with technical notes on data sources and definitions.



Indicator, by Topic	Notable Strengths	Notable Weaknesses
Youth literacy rate(%)		✓
<b>Employment and Workforce</b>		
Labor force participation rate (%)		✓
Rigidity of employment index	✓	
<b>Agriculture</b>		
Agricultural value added per worker (1995 US\$)		✓



# 1. Introduction

This paper is one of a series of economic performance assessments prepared for the EGAT Bureau to provide USAID missions and regional bureaus with a concise evaluation of a broad range of indicators relating to economic growth performance in designated countries. The report draws on a variety of international data sources<sup>1</sup> and uses international benchmarking against reference group averages and comparator countries (in this case, Uganda and Rwanda) to identify major trends, constraints, and opportunities for strengthening growth and reducing poverty.

The methodology used here is analogous to examining an automobile dashboard to see which gauges are signaling problems. Sometimes a blinking light has obvious implications—such as the need to fill the fuel tank. In other cases, it may be necessary to have a mechanic probe more deeply to assess the source of the trouble and discern the best course of action.<sup>2</sup> Similarly, the Economic Performance Assessment is based on an examination of key economic and social indicators, to see which ones are signaling problems. In some cases a “blinking” indicator has clear implications, while in other instances a detailed study may be needed to investigate the problems more fully and identify an appropriate course for programmatic action.

The analysis is organized around two mutually supportive goals: transformational growth and poverty reduction.<sup>3</sup> Rapid and broad-based growth is the most powerful instrument for poverty reduction. At the same time, measures aimed at reducing poverty and lessening inequality can help to underpin rapid and sustainable growth. These interactions create the potential for stimulating a virtuous cycle of economic transformation and human development.

Transformational growth requires a high level of investment and rising productivity. This is achieved by establishing a strong ***enabling environment for private sector development***, involving multiple elements: macroeconomic stability; a sound legal and regulatory system, including secure contract and property rights; effective control of corruption; a sound and efficient financial system; openness to trade and investment; sustainable debt management; investment in education, health, and workforce skills; infrastructure development; and sustainable use of natural resources.

---

<sup>1</sup> Sources include the latest data from USAID’s internal Economic and Social Database (ESDB) and readily accessible public information sources. The ESDB is compiled and maintained by the Development Information Service (DIS), under PPC/CDIE. It is accessible to USAID staff through the Agency intranet.

<sup>2</sup> Sometimes, too, the problem is faulty wiring to the indicator—analogous here to faulty data.

<sup>3</sup> In USAID’s White Paper on *U.S. Foreign Aid: Meeting the Challenges of the Twenty-first Century* (January 2004), transformational growth is a central strategic objective, both for its innate importance as a development goal, and because growth is the most powerful engine for poverty reduction.

In turn, the impact of growth on poverty depends on policies and programs that create opportunities and build capabilities for the poor.<sup>4</sup> We call this the *pro-poor growth environment*. Here, too, many elements are involved, including effective education and health systems; policies facilitating job creation; agricultural development (in countries where the poor depend predominantly on farming); dismantling barriers to micro and small enterprise development; and progress toward gender equity.

The present evaluation of these conditions must be interpreted with caution, because a concise analysis of this sort does not provide a thorough diagnosis of the problems, or simple answers to questions about programmatic priorities. For Burundi, the standard analytical limitations are compounded by data problems and discontinuities due to the changing political situation. The aim, then, is to spot signs of serious problems for economic growth, based on a review of selected indicators, subject to limits of data availability and quality. The results should provide insight about potential paths for USAID intervention, to complement on-the-ground knowledge and further in-depth studies.

The remainder of the report discusses the most important results of the diagnostic analysis, in three sections: Overview of the Economy; Private Sector Enabling Environment; and Pro-Poor Growth Environment. Table 1-1 summarizes the topic coverage. The appendix provides a brief explanation of the criteria used for selecting indicators, the benchmarking methodology, and a table showing the full set of indicators examined for this report.

**Table 1-1**

*Topic Coverage*

Overview of the Economy	Private Sector Enabling Environment	Pro-Poor Growth Environment
<ul style="list-style-type: none"> <li>• Growth Performance</li> <li>• Poverty and Inequality</li> <li>• Economic Structure</li> <li>• Demographic and Environmental Conditions</li> <li>• Gender</li> </ul>	<ul style="list-style-type: none"> <li>• Fiscal and Monetary Policy</li> <li>• Business Environment</li> <li>• Financial sector</li> <li>• External sector</li> <li>• Economic Infrastructure</li> <li>• Science and Technology</li> </ul>	<ul style="list-style-type: none"> <li>• Health</li> <li>• Education</li> <li>• Employment and Workforce</li> <li>• Agriculture</li> </ul>

---

<sup>4</sup> A comprehensive poverty reduction strategy also requires programs to reduce the *vulnerability* of the poor to natural and economic shocks. This aspect is not covered in the template since the focus is economic growth programs. In addition, it is difficult to find meaningful and readily available indicators of vulnerability to use in the template

## 2. Overview of the Economy

This section reviews basic information on Burundi's macroeconomic performance, poverty and inequality, economic structure, demographic and environmental conditions, and indicators of gender equity.<sup>1</sup> Some of the indicators are descriptive rather than analytical, and are included to provide context for the performance analysis.

### GROWTH PERFORMANCE

With an estimated GDP per capita of \$91 in 2004, Burundi is the poorest country in the world (Figure 2-1, GDP Per Capita). Even before the civil conflict began in 1993, Burundi was one of the most impoverished nations in the world, and years of war and instability critically worsened the situation. From this destitute starting point, the need for sustainable economic growth is unquestionable. During the five years to 2004, the growth rate averaged only 2.0 percent per year, far too low to improve standards of living to a population that has been expanding by 1.9 percent per year (Figure 2-2, Real GDP Growth). Real GDP growth reached 5 percent in 2004, but in 2003 it was -1.2 percent. This erratic behavior reflects the economy's reliance on coffee and tea exports, which are subject to adverse weather conditions and fluctuating world prices. By World Bank estimates, the economy needs a growth rate of 5 percent per year over and above the population growth rate to reach pre-1993 levels by 2015.<sup>2</sup> This is particularly challenging because Burundi is small, densely populated, and landlocked. Yet a failure to achieve rapid growth will condemn future generations to deep poverty.

The immediate cause of slow growth centers on low investment and low productivity, which undoubtedly were worsened by decades of conflict. For 2003, gross fixed investment was estimated at just 11.6 percent of GDP (Figure 2-3, Share of Gross Fixed Investment). For the private sector alone, the latest data (for 2002) indicate that gross fixed investment totaled just 2.5 percent of GDP. Thus, government investment has been more than quadruple the investment in the private sector. To sustain even moderate growth, Burundi requires gross fixed investment rates comparable to those in Rwanda and Uganda (20.2 and 20.3 percent of GDP, respectively), which should be heavily weighted toward private investment (which accounts for 12.8 and 16.5 percent of GDP in Rwanda and Uganda, respectively).<sup>3</sup> Similarly, the data suggest that

---

<sup>1</sup> A separate Data Supplement provides a full tabulation of the data for Burundi and the international benchmarks, including indicators not discussed in the text, as well as technical notes on the data sources and definitions.

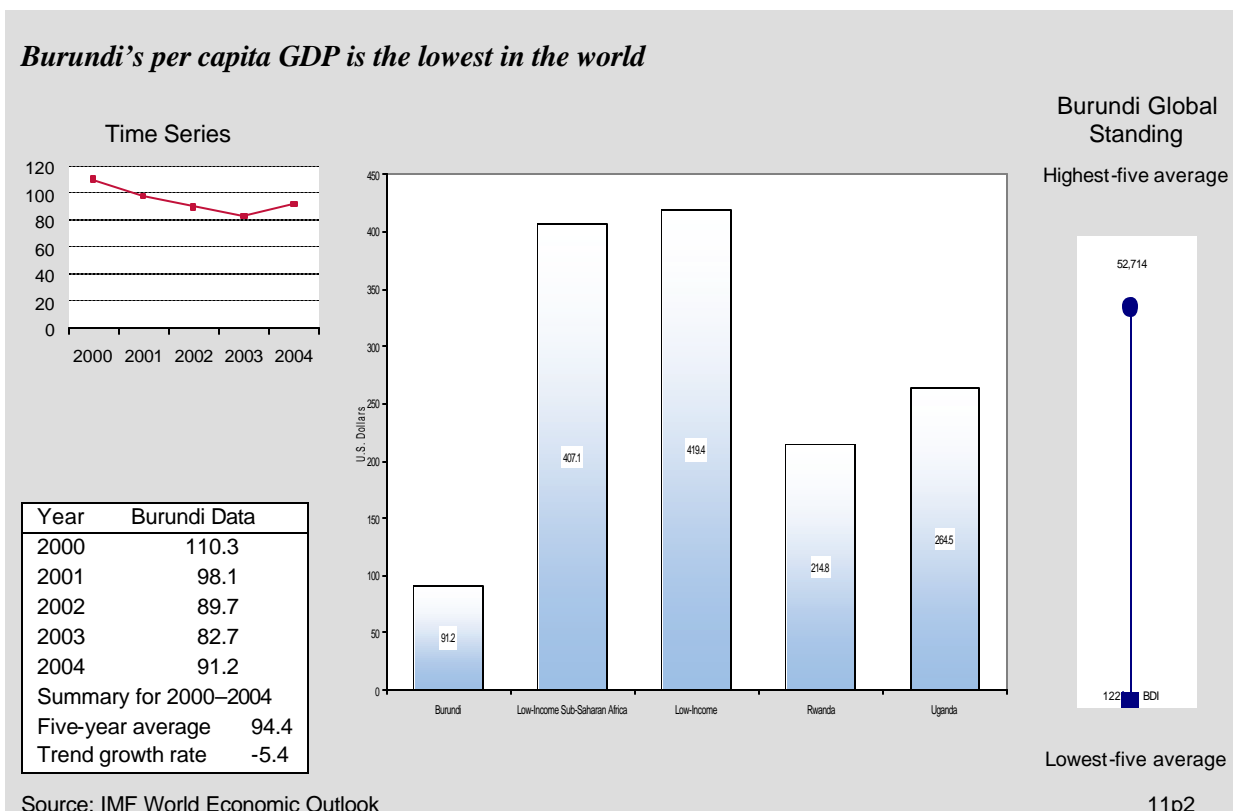
<sup>2</sup> World Bank, Burundi, Country Brief website, updated March 2005.

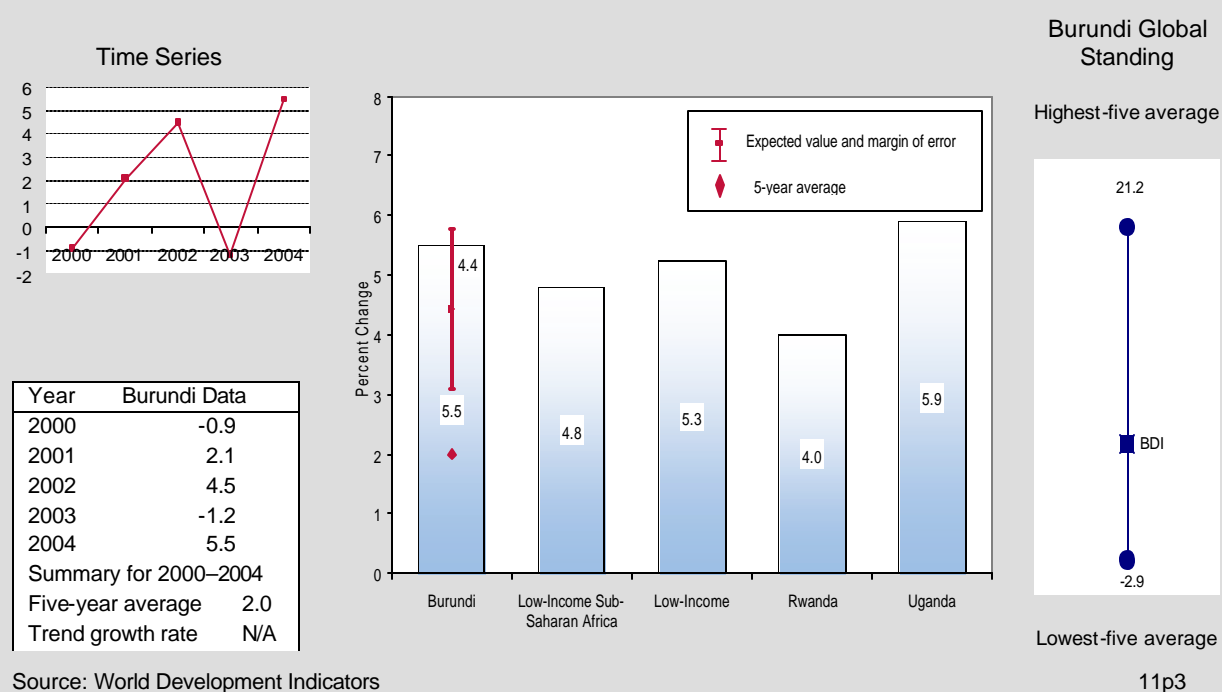
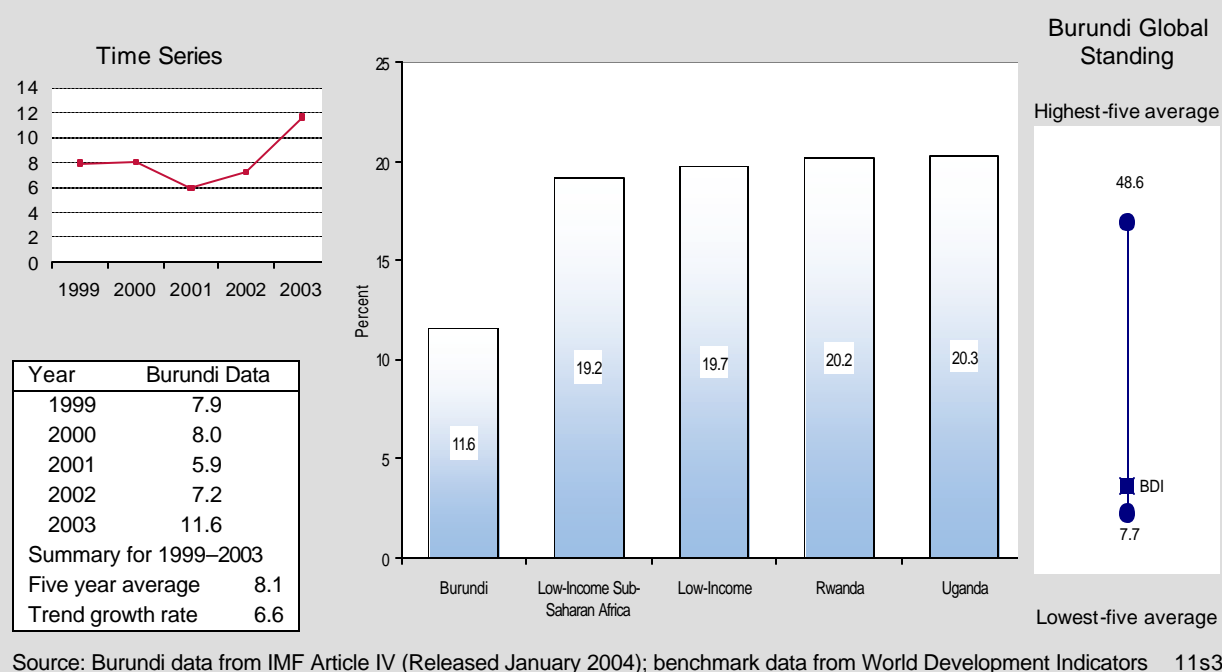
<sup>3</sup> The data on private investment for Rwanda and Uganda come from the statistical tables in IMF Country Reports 04/383 and 05/172, respectively.

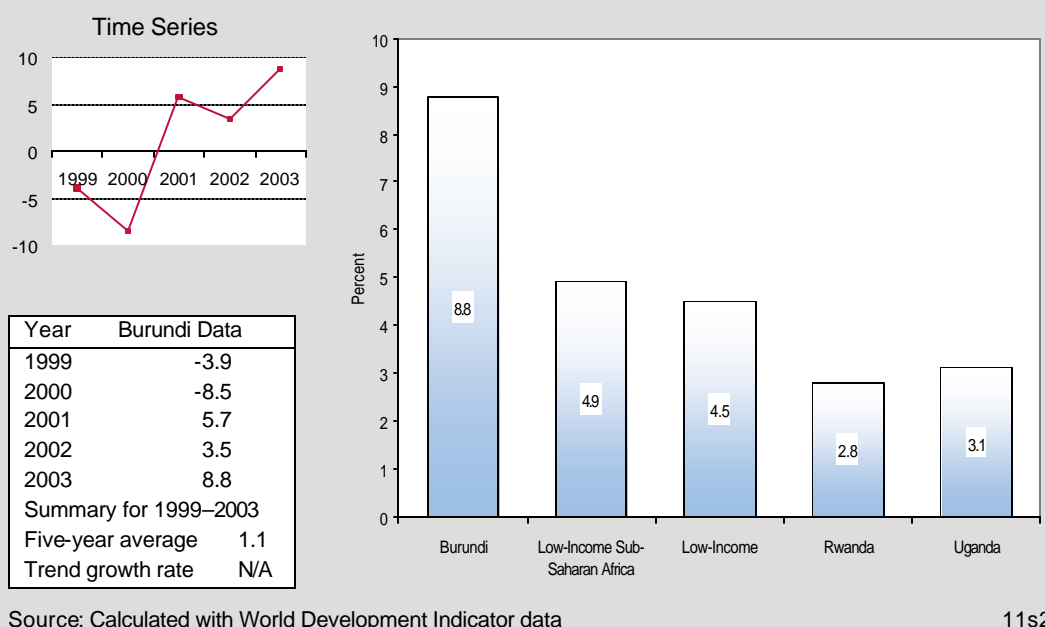
investment productivity has been poor in Burundi. The five-year average incremental capital-output ratio (ICOR) of 8.8 shows that nearly \$9 of gross investment has been needed per \$1 of extra output. This is almost triple the investment required in Uganda and Rwanda (Figure 2-4, Investment Productivity), implying very low productivity. Labor force productivity in fact declined in the five years to 2003 (latest data). The underlying factors contributing to Burundi's low levels of investment and productivity poor performance are examined in sections 3 and 4.

**Figure 2-1**

*GDP Per Capita (current US\$)*



**Figure 2-2***Real GDP Growth (Percent)****Growth is erratic and has been negative in two of last five years*****Figure 2-3***Share of Gross Fixed Investment (percent of GDP)****Gross fixed investment is extremely low, but shows improvement***

**Figure 2-4***Investment Productivity (ICOR)****Approximately \$9 of investment has been needed to get \$1 of extra output***

## POVERTY AND INEQUALITY

Poverty in Burundi is severe and pervasive. Sixty-eight percent of the population lived below the national poverty line in 2002. This is worse than all the benchmarks: Rwanda's rate is 60 percent, Uganda's rate is 35 percent and the regression benchmark—which estimates the expected poverty level for a country with Burundi's characteristics—is 56 percent.<sup>4</sup> This reality is reflected in the percentage of the population living on a diet that is insufficient for minimum energy requirements: 70 percent. As shown in Figure 2-5, this is more than double the average for low-income Africa (hereafter, LI Africa) and for all low-income countries (Figure 2-5, Population below Minimum Dietary Consumption), and also far worse than in Rwanda and Uganda. This is a grave concern because undernourishment seriously affects labor productivity and earning capacity.

A broader measure of poverty, the UNDP Human Poverty Index (HPI), which takes into account access to safe water, literacy, and health, as well as nutrition, Burundi's score of 45.8 for 2002 ranked the country 82nd in deprivation out of 95 developing countries.<sup>5</sup> By this poverty gauge, deprivation in Burundi is similar to the LI Africa average of 45.0 and Rwanda's score of 44.7.

<sup>4</sup> National poverty lines differ across countries, thus cross-country comparisons must be interpreted with caution. Due to insufficient poverty data in the World Development Indicators 2005 for other countries in the region, the regional averages cannot be used here as a benchmark for comparison.

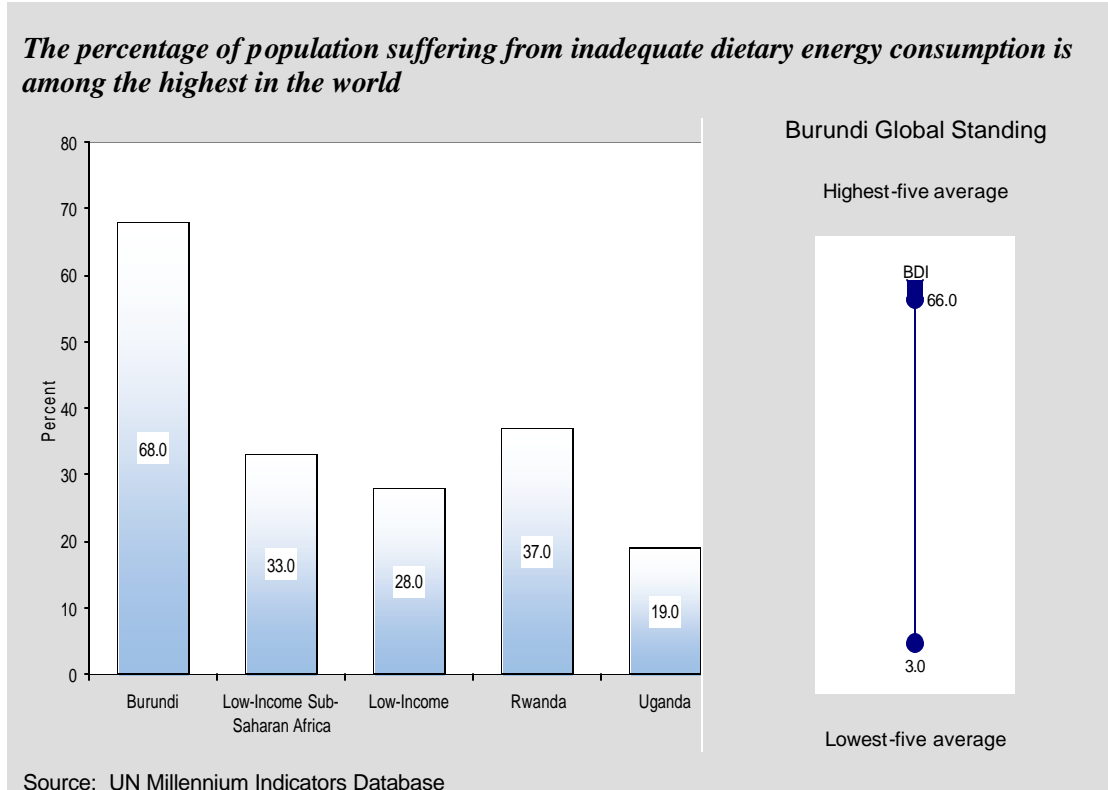
<sup>5</sup> Burundi's score was 45.8 in 2002. The Human Poverty Index ranges from 0 (no deprivation) to 100 (extreme deprivation). UNDP, Human Development Report 2004, Cultural Liberty in Today's Diverse World. [http://hdr.undp.org/statistics/data/indic/indic\\_17\\_1\\_1.html](http://hdr.undp.org/statistics/data/indic/indic_17_1_1.html)



Uganda's score of 36.4 indicates that much better conditions can be achieved through strong growth and a pro-poor policy environment.

**Figure 2-5**

*Population below Minimum Dietary Energy Consumption (percent)*



Burundi's main strategies to combat poverty, as outlined in the Interim Poverty Reduction Strategy Paper (PRSP, January 2004), focus on resolving problems of governance and insecurity, stabilizing the macroeconomic framework, improving access to basic social services, improving social protection for war victims, controlling HIV/AIDS and other epidemics, and struggling for gender equality. Donor programs in these areas may help Burundi start on the long path of poverty reduction. The final PRSP is scheduled for release in 2005; its completion will be an important sign of commitment by Burundi's government to address the poverty problem.

## ECONOMIC STRUCTURE

The structure of output in Burundi is indicative of a very low level of development. Over the five years to 2003, the share of GDP originating in agriculture fell slightly to 49 percent, but remains far higher than all benchmark standards; the shares in industry<sup>6</sup> and services rose marginally to about 19 and 32 percent, respectively. The manufacturing sector is comprised mostly of small and medium enterprises engaged mostly in agricultural processing, beverages,

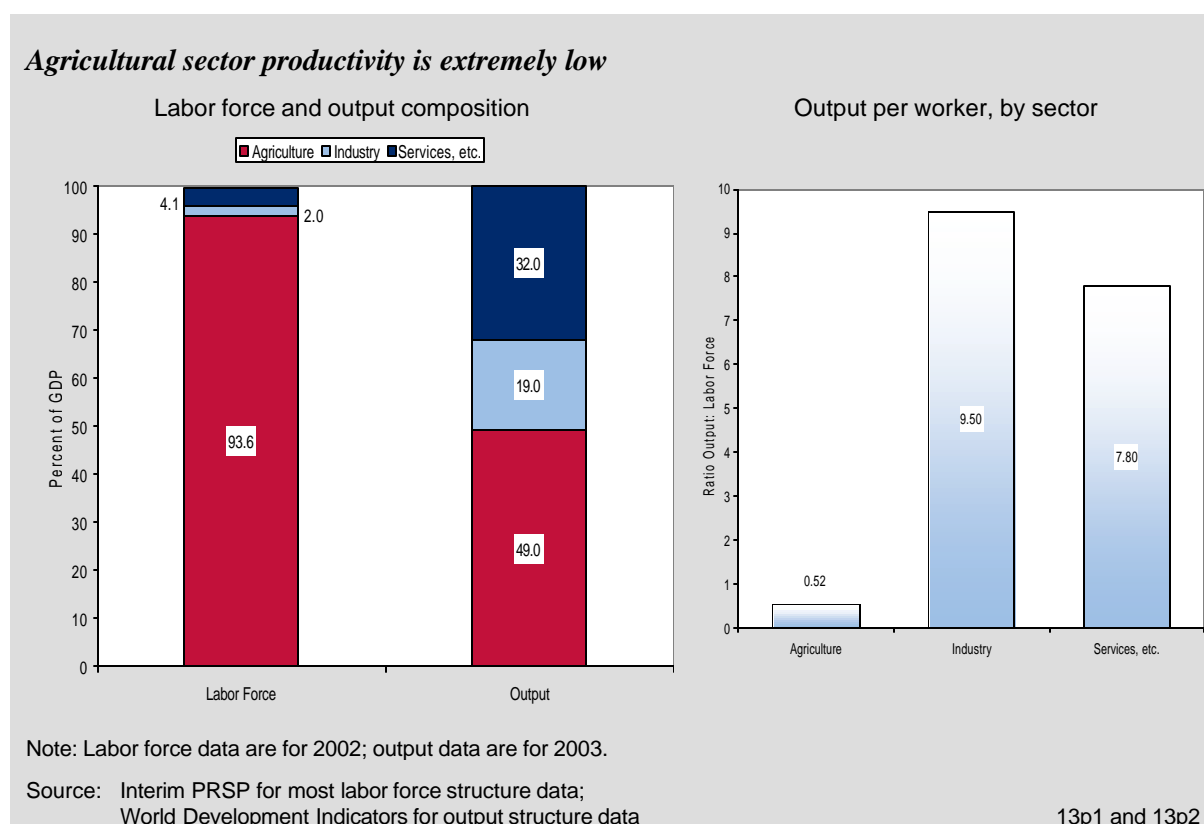
<sup>6</sup> In addition to manufacturing, "industry" includes mining and quarrying, electricity, gas and water, and construction.

consumer goods, textiles, hides and skins, and construction material. Key factors contributing to the stagnant economic structure are physical isolation, poor transport facilities, high population density, and serious land degradation, as discussed below.

Agriculture employs 93 percent of the labor force. Only 2 percent of workers are engaged in industry; yet they produce close to 20 percent of GDP. The service industry employs just 4 percent of the labor force but produces nearly a third of GDP. Clearly, labor productivity in agriculture is extremely low compared to the other sectors (Figure 2-6, Labor Force and Output Structure). There is an immediate and critical need for the government and donors to develop programs for increasing productivity in agriculture. At the same time, the rapid creation of opportunities outside agriculture is essential to increase incomes and stimulate economic transformation.

**Figure 2-6**

*Labor force and output structure, percent of GDP*



## DEMOGRAPHY AND ENVIRONMENT

Burundi is a small, landlocked country with the second-highest population density in LI Africa.<sup>7</sup> With 90 percent of its 7 million people living in rural settings, Burundi is also one of the least urbanized countries in the world. Most of the volcanic arable land, which accounts for a large

<sup>7</sup> U.S. Department of State, Bureau of African Affairs, *Background Note: Burundi*, June 2005.

share of the territory, is entirely devoted to agriculture, making small-scale subsistence farming the largest economic activity. But population pressure is accelerating environmental degradation, and soil erosion is reducing productive potential. A new index, the Environmental Sustainability Index (ESI), combines data on 76 environmental variables. Burundi's score of 40.0 (out of 100) is well below the regression benchmark of 46.3 and the average for LI Africa of 44.9, as well as the scores for Rwanda (44.8) and Uganda (51.3). Components of the ESI reveal serious problems with population stress on the land, ecosystem stress, weak science and technology, and poor human sustenance.

Burundi's estimated population growth rate of 1.9 percent for 1999–2003 is below the average of 2.3 percent for LI Africa, but virtually the same as the trend in GDP growth of 2.0 percent (2000–2004), leading to stagnant living conditions. The slow population growth rate is evidently due to emigration and high mortality, because the total fertility rate (TFR) remains very high, at 5.7 in 2003.<sup>8</sup> With a calming of the conflict, mortality rates are likely to decline and refugees will return, as common in post-conflict situations, resulting in a looming population boom. In fact, the United Nations reports a drastic increase in the numbers of refugees returning from Rwanda and Tanzania since the June elections.<sup>9</sup> A substantial increase in population will not only put a strain on social services and environmental resources, but also increase the rate of GDP growth needed for effective poverty reduction. Furthermore, population pressure on the land can itself cause of political instability, in the absence of new economic opportunities and rising living standards.

Reflecting the high fertility rate, each person of working age in Burundi has 0.92 dependents. This is comparable to the dependency rates for LI Africa, Rwanda, and Uganda. Indeed, the entire region has nearly one dependent per person of working age. This high level of age dependency is both a symptom and a cause of deep poverty. On a positive note, the estimated dependency rate for Burundi declined marginally, from 0.96 in 1999, and the estimated TFR has also fallen, from 6.3 in 1997. With the restoration of peace and security, these numbers may trend upward.

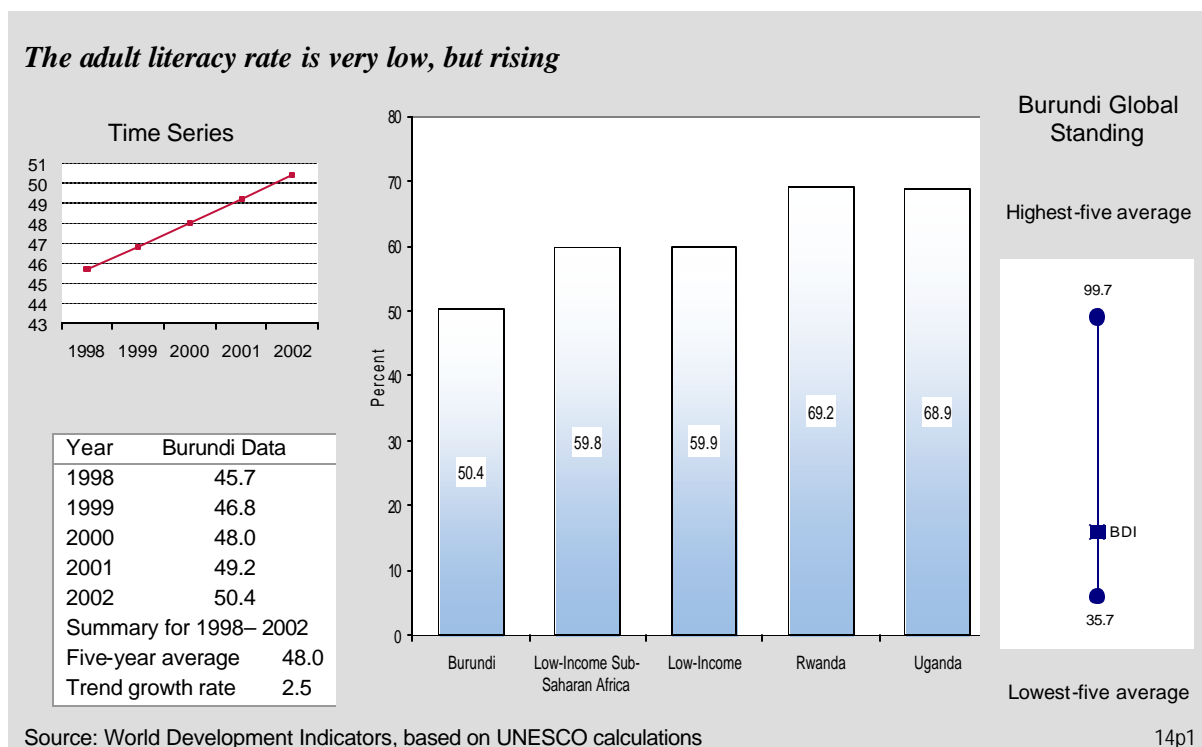
Another vital characteristic of the population is the adult literacy rate. At 50.4 percent in 2002, the literacy rate in Burundi is very low by all standard comparisons (Figure 2-7, Adult Literacy Rate). Nonetheless, the trend was favorable from 1998 to 2002. This is a significant achievement (if the estimates are accurate) because adult literacy is usually slow to change, as an indicator of the stock of basic human capital.<sup>10</sup>

---

<sup>8</sup> World Development Indicators, 2005. The TFR is the number of live births an average woman would have over the course of her child-bearing years, given prevailing age-specific fertility and mortality rates.

<sup>9</sup> United Nations High Commission for Refugees, Press Briefing, August 12, 2005, [http://www.unog.ch/80256EDD006B9C2E/\(httpNewsByYear\\_en\)/E025B92711B5431DC125705B0051C046?OpenDocument](http://www.unog.ch/80256EDD006B9C2E/(httpNewsByYear_en)/E025B92711B5431DC125705B0051C046?OpenDocument)

<sup>10</sup> See UNESCO, EFA Global Monitoring report 2003/4 at <http://portal.unesco.org/education/en/>

**Figure 2-7***Adult Literacy Rate*

## GENDER

The Interim PRSP indicates that cultural biases restricting women's access to resources and problems in integrating women into decision-making bodies are major impediments to gender equity in Burundi. These problems are reflected in the adult literacy rate, which is 53 percent higher for men than for women; this degree of disparity is far greater than in the benchmark groups and countries (Figure 2-8, Male-to-Female Adult Literacy Ratio). Educating women is a leading priority in part because of the effect of female education on economic growth: better educated women are more productive, have fewer children, are less prone to fall victim to HIV/AIDS, and pass along better health and education to their children. Focusing on the school age population, the gross enrollment rate for males in 2002 was 31 percent higher than for females, signaling a continuation of sharp gender imbalances in education. Here, too, the disparity in Burundi is far greater than the average for LI Africa (20 percent) or the values for Uganda (7 percent) and Rwanda (12 percent).

Another sign of gender disadvantage is seen in the life expectancy indicator. In most of the world, women live significantly longer than men, often by five years or more in countries with higher human development. In Burundi, life expectancy is nearly identical for both women and men, at just over 41 years.

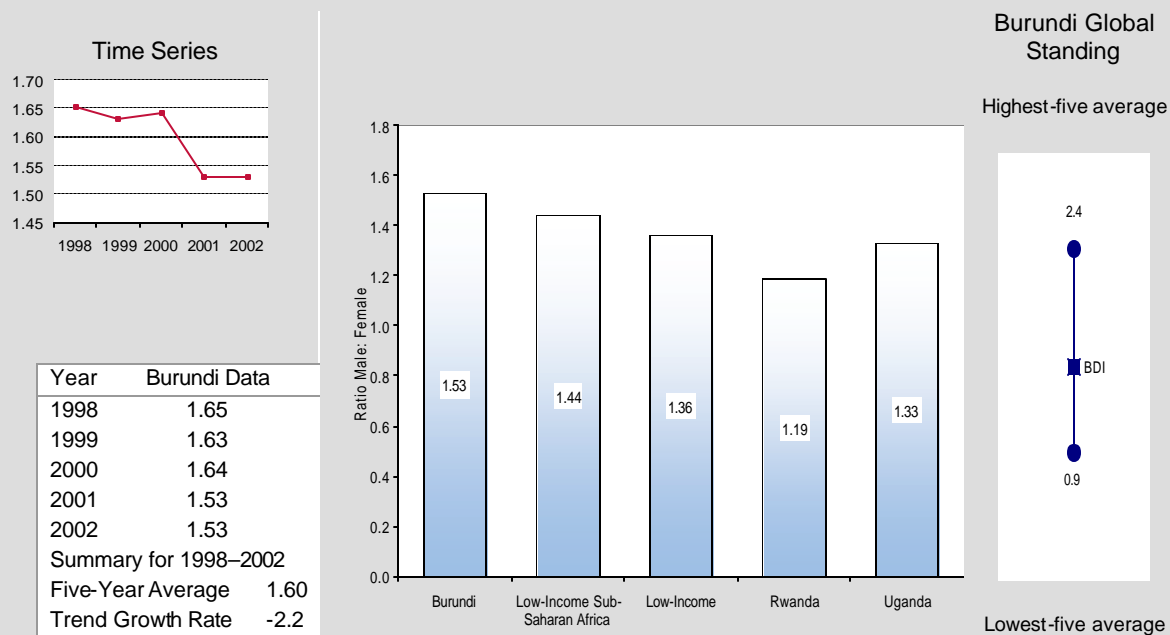
As stated in the interim PRSP, the conflict in Burundi has disrupted families and reinforced gender imbalances. Reducing this inequality is essential for poverty elimination because women bear a disproportionate burden of lack of opportunities and access to education and health services. Gender considerations should influence the design of all donor programs. For economic

growth programs, assistance aimed at enhancing the productivity of subsistence farming, promoting off-farm opportunities for women, and developing gender-sensitive microfinance programs are possible priorities for donor consideration.

**Figure 2-8**

*Male-to-Female Adult Literacy Ratio*

*There is a very large gender disparity in adult literacy*



Source: Burundi data from the interim PRSP (released by IMF in January 2004). Benchmark data from World Development Indicators.



# 3. Private Sector–Enabling Environment

This section reviews indicators for key components of the enabling environment for encouraging rapid and efficient growth of the private sector. Sound fiscal and monetary policies are essential for macroeconomic stability, which is a necessary (though not sufficient) condition for sustained growth. A dynamic market economy also depends on basic institutional foundations, including secure property rights, an effective system for enforcing contracts, and an efficient regulatory environment that does not impose undue barriers on business activities. Financial institutions play a major role in mobilizing and allocating saving, facilitating transactions, and creating instruments for risk management. Access to the global economy is another pillar of a good enabling environment, because the external sector is a central source of potential markets, modern inputs, technology, and finance, as well as competitive pressure for efficiency and rising productivity. Equally important is development of the physical infrastructure to support production and trade. Finally, developing countries need to adapt and apply science and technology as a basis for attracting efficient investment, improving competitiveness, and stimulating productivity growth.<sup>1</sup>

## FISCAL AND MONETARY POLICY

The government's fiscal and monetary policies get mixed reviews. The inflation rate dropped from 24.3 percent in 2000 to under 8 percent in 2004<sup>2</sup> (Figure 3-1, Inflation Rate), but this still exceeded the IMF program target of 5.5 percent because of rising petroleum prices and higher-than-programmed money-supply growth.<sup>3</sup> At the same time, the government's fiscal posture is poor. For 2004, the IMF estimates that the overall government budget deficit (including grants) amounted to 8.0 percent of GDP, up sharply from 6.6 percent in 2003 and 1.4 percent in 2002.<sup>4</sup>

---

<sup>1</sup> The Science and Technology section usually included in Economic Performance Assessments is excluded from this report because of a lack of data.

<sup>2</sup> An MCA indicator.

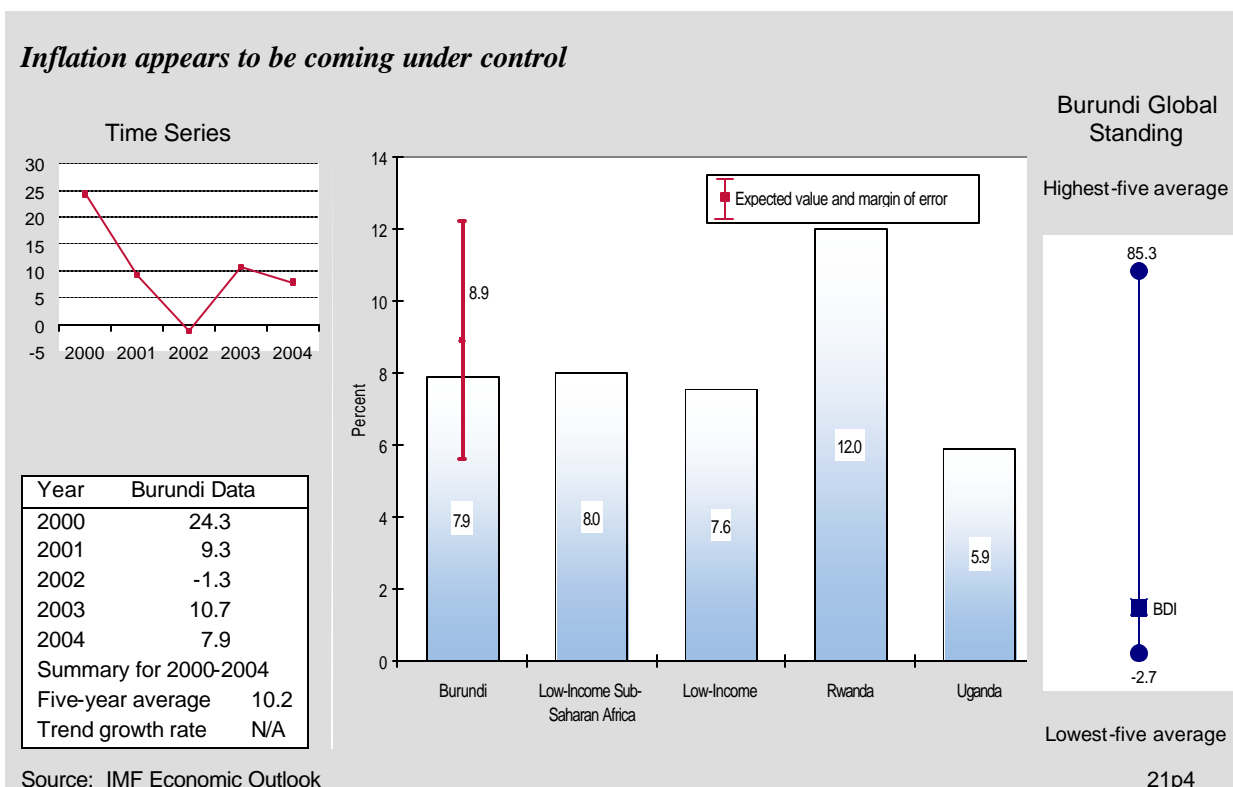
<sup>3</sup> IMF, Burundi: First Review under the Three-Year Arrangement under the Poverty Reduction and Growth Facility and Request for Waiver of Performance Criteria, December 21, 2004.

<sup>4</sup> Budget data for 2004 are IMF projections based on outturns through September. See IMF, Burundi: First Review Under the Three-Year Arrangement Under the Poverty Reduction and Growth Facility and Request for Waiver of Performance Criteria, December 21, 2004. The IMF program called for a primary budget surplus of 0.5 percent of GDP; the actual deficit was 3.1 percent of GDP. The primary balance is calculated as the difference between revenue and primary expenditure, defined in this case as non-interest

On a commitment basis, the IMF estimated a *surplus* for 2004 of 0.3 percent of GDP; the large difference reflects donor support that did not materialize, totaling over 8 percent of GDP. Nonetheless, donor grants in 2004 still covered a large share of the gap between government expenditure (42.2 percent of GDP) and domestic revenue (19.4 percent of GDP).

**Figure 3-1**

*Inflation Rate*



The budget deficit has been driven by expenditures, which soared from 26 percent of GDP in 2000–2002 to an estimated 42 percent in 2004. A large increase in 2003 was triggered partly by subsidies to cover losses in the coffee sector due to a drop in production related to drought and falling world prices.<sup>5</sup> Although coffee production and earnings improved in 2004, government expenditure continued to rise sharply. According to the IMF's Poverty Reduction and Growth Facility (PRGF) review, this increase stemmed largely from outlays on the political transition and peace process, and domestically financed component of donor-funded project spending.

expenditure plus domestically financed capital expenditure and net lending, excluding special programs such as elections and DDR/SSR expenditures as well as foreign-financed projects.

<sup>5</sup> The subsidies include payments to a large state-owned coffee processor, which the government has not succeeded in privatizing. IMF, *Burundi: First Review*, December 21, 2004.



Although expenditures have climbed, revenue has fluctuated between 19 and 21 percent of GDP in the past five years.<sup>17</sup> Nonetheless, the IMF's PRGF review notes "buoyant receipts from the income tax, reflecting strengthened tax administration"<sup>6</sup> (Exhibit 3-1).

Monetary policy has been under pressure to accommodate these large fiscal deficits. In 2004, the broad money supply grew by 18.6 percent, with net credit to government accounting for 99 percent of this growth. On the brighter side, credit to the private sector increased in line with the growth of nominal GDP,<sup>7</sup> while interest rates and the exchange rate remained reasonably stable.

The government has been taking serious steps to overcome the unsustainable fiscal imbalances encountered in 2003 and 2004. Given the country's extreme lack of resources, it is imperative that the government manage its fiscal position prudently, to establish a credible macroeconomic policy environment for fostering private investment and maintaining donor support.

#### IMF Program Status for Burundi

The IMF approved a three-year PRGF arrangement for Burundi in January 2004. In the first PRGF review, in January 2005, the IMF stated, "The overall program performance was mixed owing to fiscal slippages and delays in implementing structural reforms. Notwithstanding these broadly positive developments, Burundi faces enormous challenges, including the need to complete the political transition and the demobilization of armed combatants, to secure debt relief, and to address widespread poverty and work to meet the Millennium Development Goals."

## BUSINESS ENVIRONMENT

Institutional barriers to doing business, including corruption in government, are critical determinants of private sector development and prospects for sustainable growth. Compared to regional benchmarks, Burundi's performance on institutional indicators is about average for the region; these standards, however, do not exemplify a strong enabling environment for private investment. There is great need to reduce impediments to doing business and great scope to do so.

Corruption is the foremost problem. According to the World Bank Institute, only 6 percent of all countries in the world rate worse than Burundi on its Control of Corruption Index, which is a central indicator for Millennium Challenge Account (MCA) eligibility.<sup>8</sup> According to the *UN Global Corruption Report—Central Africa 2003*,<sup>9</sup> the entire region has failed to implement effective institutional and legal safeguards against corruption.

<sup>6</sup> IMF, Burundi: First Review under the Three-Year Arrangement under the Poverty Reduction and Growth Facility and Request for Waiver of Performance Criteria, December 21, 2004, page 9.

<sup>7</sup> The increase in credit to government and the private sector sum to more than 100 percent of the increase in money supply, because other components of money growth were negative, notably the change in net foreign assets of the banking system.

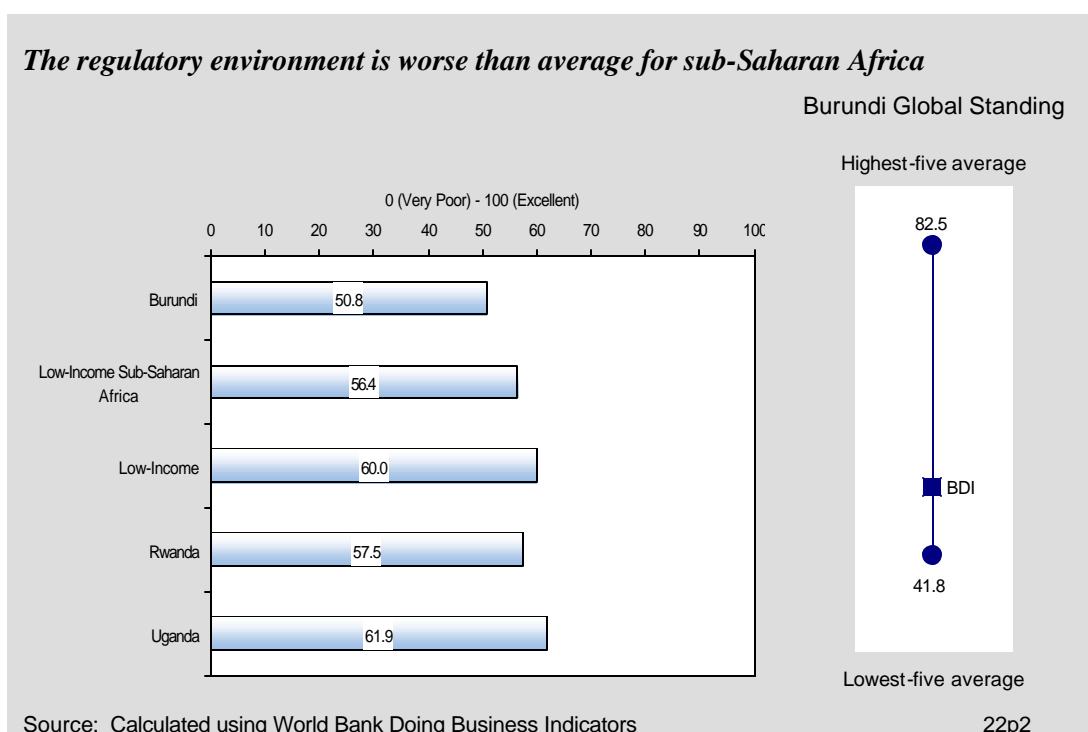
<sup>8</sup> The World Bank's Control for Corruption Index is used in this report because Transparency International has no data for a Corruption Perception Index for Burundi. See [http://info.worldbank.org/governance/kkz2004/sc\\_country.asp](http://info.worldbank.org/governance/kkz2004/sc_country.asp).

<sup>9</sup> Published by the UNPAN, <http://unpan1.un.org/intradoc/groups/public/documents/APCITY/UNPAN008452.pdf>

Burundi also receives a poor score on the World Bank's Rule of Law index, another MCA indicator. This index shows the extent to which citizens have confidence in and abide by the rules in society. On a scale of -2.5 to 2.5, Burundi's score is -1.5, well below the scores of Rwanda and Uganda (-0.9 and -0.8, respectively) and the average for LI Africa (-1.0). These findings are corroborated by a composite index of Doing Business indicators,<sup>10</sup> which shows that Burundi's institutional environment is deficient even by regional standards. On a scale of 0 to 100, Burundi scores 50.8, compared to an average of 56.4 for LI Africa (Figure 3-2, Doing Business Composite Index).

**Figure 3-2**

Doing Business *Composite Index*



These indicators convey a consistent message: institutional constraints severely impair private sector development. Consequently, programs to control corruption and promote institutional reform should be the principal focus of donor agencies and the government.

## FINANCIAL SECTOR

A sound, efficient, and competitive financial sector is a fundamental mechanism for mobilizing savings, allocating financial resources, fostering entrepreneurship, and improving risk management. Burundi's banking system is surprisingly robust given the extremely low level of development. One basic indicator of financial development is the degree of monetization,

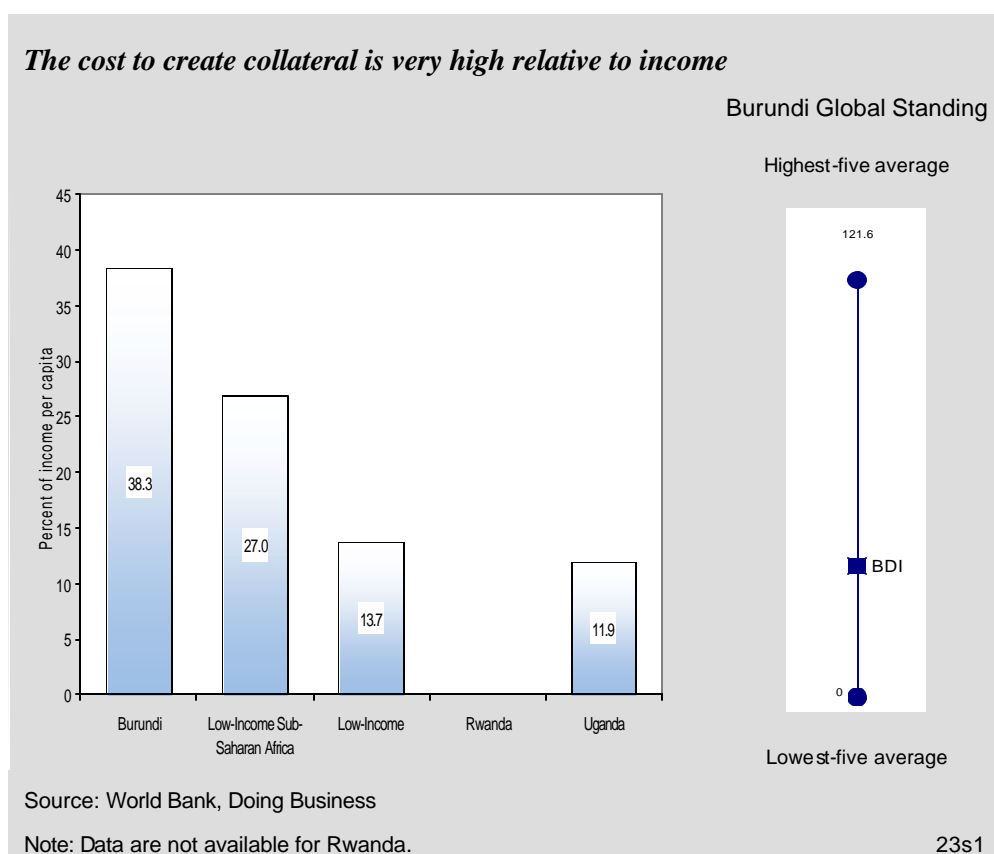
<sup>10</sup> The composite index has been constructed for this report on the basis of guidance from USAID/EGAT. See the technical notes in the Data Supplement for details.

measured by the ratio of broad money (currency plus bank deposits) to GDP. For Burundi, the ratio has risen from 19.9 percent in 1999 to 28.1 percent in 2004, well above the LI Africa average (21.6 percent), as well the figures for Rwanda (17.5) and Uganda (18.9). Another favorable sign is that real interest rate on loans, at 5.9 percent in 2003, is lower than the benchmarks, though with fluctuations from year to year. Domestic credit to the private sector is surprisingly high at 25.3 percent of GDP in 2004; the corresponding figure for the comparator economies is 11 percent or less.<sup>11</sup> Unfortunately, sources do not provide data on the interest rate spread (lending rate minus deposit rate), a gauge of efficiency in the banking system.

Two indicators suggest that major obstacles to financial development still exist. First, the cost to create collateral (38.3 percent of per capita income) is well above the LI Africa average of 27.0 percent and Uganda's score of 11.9 percent<sup>12</sup> (Figure 3.3, Cost to Create Collateral).

**Figure 3-3**

*Cost to Create Collateral (percent of per capita income)*



<sup>11</sup> These figures are questionable, since they imply that domestic credit to the private sector is nearly as large as the money supply, which is 28.1 percent of GDP. Data come from WDI 2005, and the IMF's latest PRGF review (December, 2004, Table 4, page 25).

<sup>12</sup> No figure is available for Rwanda.

Also, Burundi's Country Credit Rating Index from the Institutional Investor is 13.1 (on a 0–100 scale), whereas the LI Africa average is 18.9, Rwanda's score is 14.5, and Uganda's 21.2.<sup>13</sup> These indicators suggest that important institutional constraints need to be addressed to strengthen the financial system. Neither do these indicators shed light on the availability of banking services or the quality of bank credit. Ensuring a sound banking system is a paramount concern, because a banking crisis undermines the foundation for growth.

## EXTERNAL SECTOR

Fundamental changes in international commerce and finance, including reduced transport costs, advances in telecommunications technology, and lower policy barriers, have fueled a rapid increase in global integration over the past 25 years. The international flow of goods and services, capital, technology, ideas and people offer great opportunities for Burundi to boost growth and reduce poverty by stimulating investment, productivity, and efficiency; providing access to broader markets and new ideas; and expanding the range of consumer choice. Globalization also creates new challenges in the need for institutions, policies, and regulations to take full advantage of international markets, develop cost-effective approaches to cope with adjustment costs, and establish systems for monitoring and mitigating the associated risks.

### International Trade and Current Account

The most common indicator of openness is the ratio of exports plus imports to GDP (Figure 3-4, Trade Ratio). For the five-year period 2000–2004, this trade ratio averaged just 35.7,<sup>14</sup> which is significantly below the regression benchmark (67.4) and the average for LI Africa (59.7).

However, the trade ratios for Uganda (38.7) and Rwanda (36.2) are also very low, suggesting that being landlocked in the center of Africa is a fundamental barrier to trade. Even so, Burundi's trade regime remains restrictive. According to the Millennium Challenge Corporation, Burundi's score on the Trade Policy Index (TPI) from the Heritage Foundation is a 5 (on a scale from 1, excellent, to 5, very poor). This indicates that trade barriers are seriously hindering the free flow of foreign commerce.<sup>15</sup> Under the IMF-supported reform program, the authorities are implementing structural reforms to reduce the number of tariff bands and the import duty rates, lift some trade restrictions, and liberalize the coffee sector.<sup>16</sup> In addition, Burundi joined the COMESA free trade agreement in 2004, eliminating duties on imports from partner countries. These are important steps to overcome the constraints imposed by a very small and impoverished domestic market.

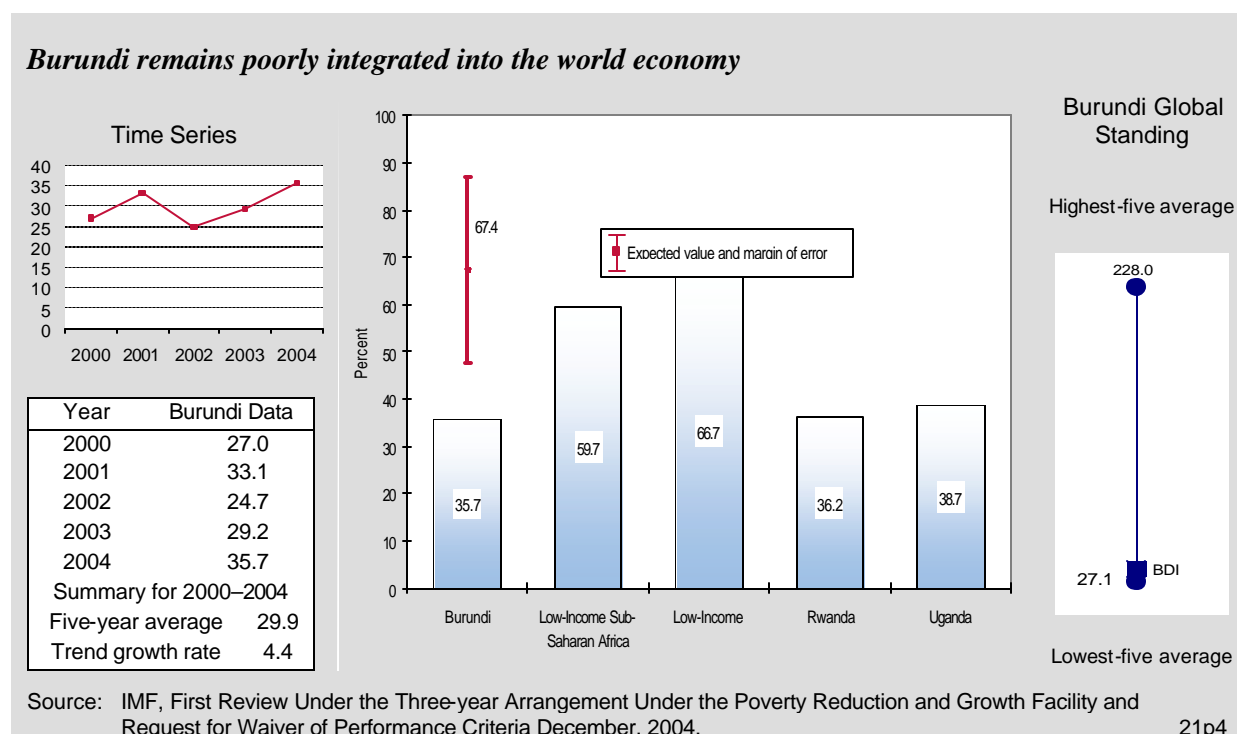
---

<sup>13</sup> An MCA indicator.

<sup>14</sup> Data for 2004 are IMF projections made after or on September 2004 for the IMF's Burundi: First Review under the Three-Year Arrangement under the Poverty Reduction and Growth Facility and Request for Waiver of Performance Criteria, December 21, 2004.

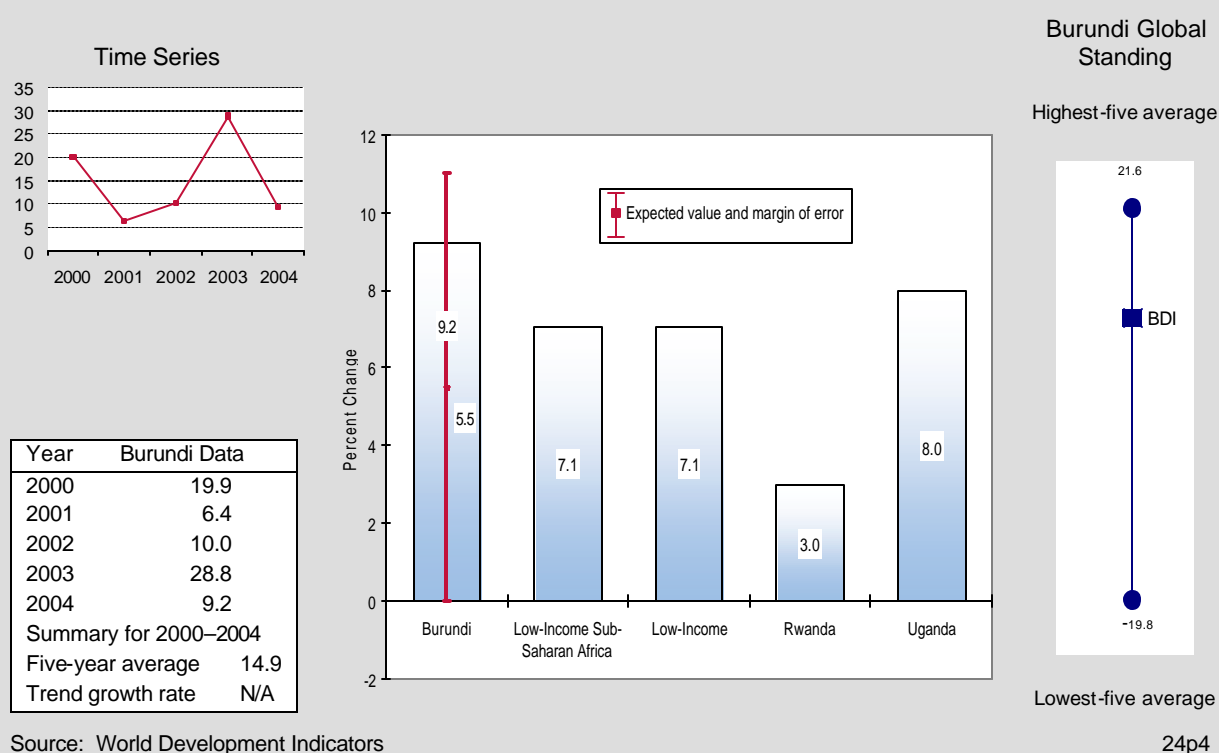
<sup>15</sup> The Heritage Foundation website does not present a score for Burundi after 2000 (when it was 4.0), though information is provided through 2003. The score of 5.0 from the Millennium Challenge Corporation is evidently an estimate using the Heritage Foundation methodology.

<sup>16</sup> IMF, Burundi: First Review under the Three-Year Arrangement under the Poverty Reduction and Growth Facility and Request for waiver of Performance Criteria, December 21, 2004.

**Figure 3-4***Trade Ratio (Exports plus Imports as Percent of GDP)*

Currently, however, exports are concentrated in coffee and tea, leaving the country highly vulnerable to price shocks and weather fluctuations. There is a slight trend toward diversification, with food production (mostly coffee and tea) dropping to 93.1 percent of total exports in 2002 (latest data), from 99.1 percent in 1998. Starting from an extremely low base, export earnings have been increasing fairly rapidly, but with large fluctuations in the growth rate from year to year. For the period 2000–2004, export growth averaged 14.9 percent per year, which exceeds all benchmark standards (Figure 3-5, Growth of Exports). Taken together, these indicators suggest that the most pressing need is for programs to foster export diversification, a point the government is well aware of.

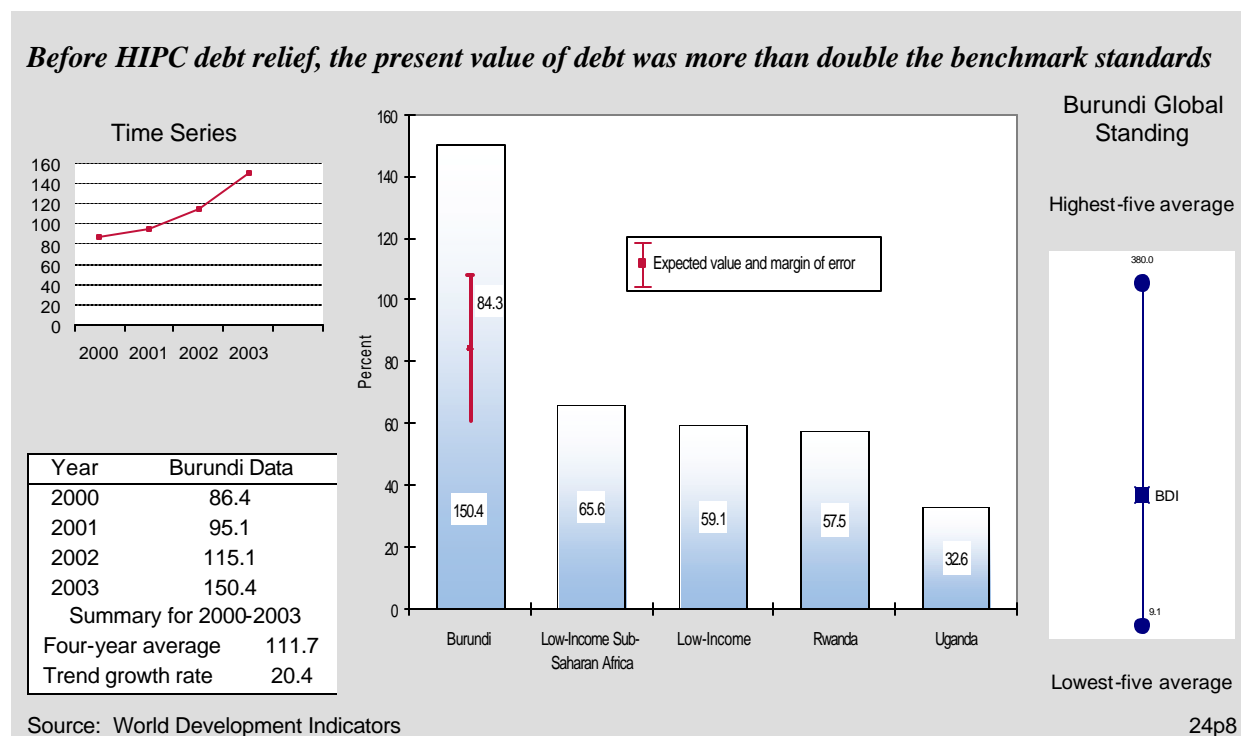
The overall current account deficit has averaged 9.1 percent of GDP over the period 2000–2004; this is close to the regression benchmark of 8.4 for an African country with Burundi's level of income. The sustainability of this deficit depends entirely on continued access to international financial support, as discussed below.

**Figure 3-5***Growth of Exports (Goods and Services)**Exports have been recovering rapidly, even with a drop in world coffee prices*

## International Financing

In early August 2005, Burundi reached the decision point under the enhanced HIPC program, which required completion of the interim PRSP and satisfactory compliance with the IMF program arrangement.<sup>17</sup> This event is crucial because the country has faced an unmanageable and unsustainable debt burden (Figure 3-6, Present Value of Debt). At 150.4 percent of GDP, the present value of Burundi's debt obligations was more than double the benchmark standards. As a result, Burundi qualified for interim debt relief covering over 90 percent of the present value of the country's external debt. Given the low level of export earnings and negligible inflows of private capital, Burundi relies heavily on foreign aid to cover its debt service payments, as well as the costs of reconstruction, political rehabilitation, and economic development. Lower debt service costs therefore free up resources for other pressing needs. In addition, new foreign assistance must center on grants or loans on very lenient terms to minimize building up new debt.

<sup>17</sup> IMF, Press Release, August 5, 2005.

**Figure 3-6***Present Value of Debt (percent of GNI)*

In 2003, foreign aid amounted to 39.0 percent of GDP, more than double the benchmark standards (Figure 3-7, Aid), and almost twice the value of exports of goods and services. The high inflow of foreign aid is both a sign of donor support for post-conflict reconstruction and an opportunity to set the country on a development path and establish more favorable conditions to attract private investment. The situation also gives donors an opportunity to encourage broader and deeper reforms. Since Burundi has ongoing programs with the IMF and the World Bank, there are grounds for optimism that the government will pursue the reforms that are needed to improve the climate for private investment. With the anticipated release of the full PRSP in 2005, Burundi will be a step closer to finalizing its debt reduction through the HIPC process.

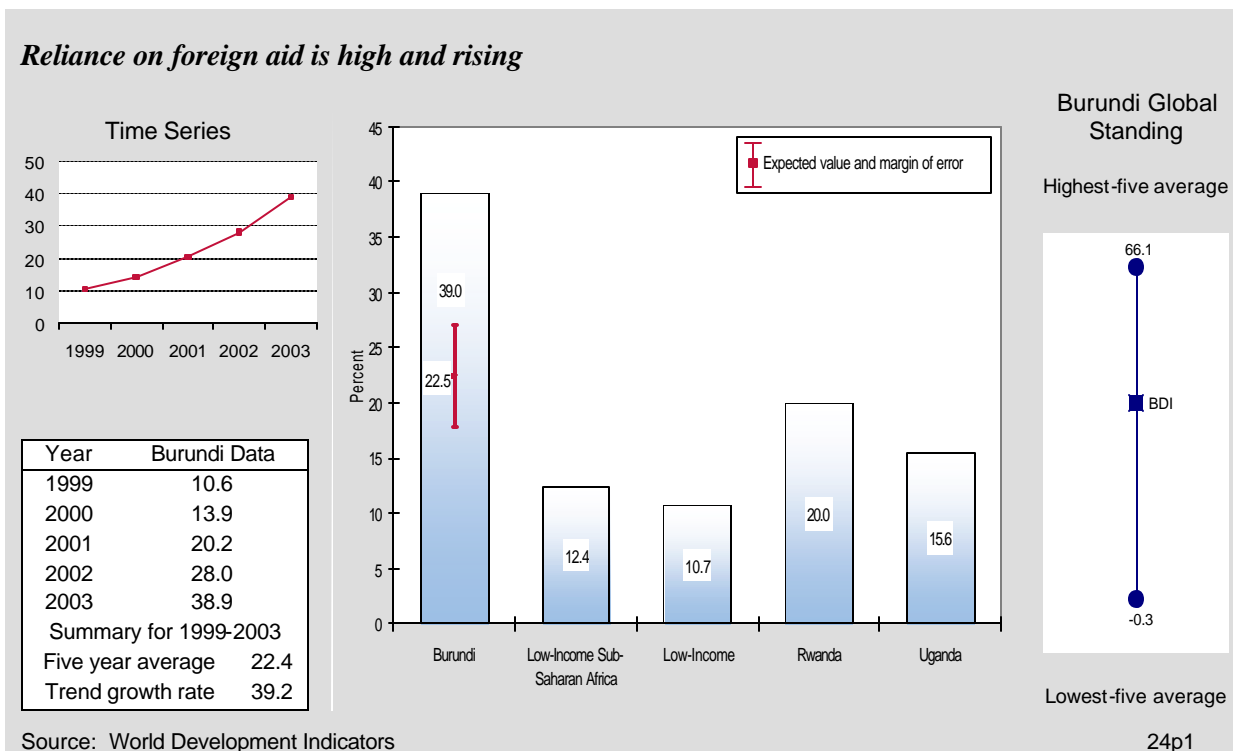
In addition to success in obtaining debt relief, and recent growth of exports, there are other positive signs in the external sector. International reserves rose from a crisis level of 1.3 months of imports in 2001 to more than 4 months of imports in 2004. The restitution of reserves reduces the risk of instability and improves confidence in the government's ability to manage the economy. The government also implemented foreign exchange auctions starting in 2000 to reduce imbalances between the supply and demand for foreign exchange and provide more efficient price signals to the market.<sup>18</sup> Following the opening of private foreign-exchange

<sup>18</sup> IMF, Burundi: First Review Under the Three-Year Arrangement Under the Poverty Reduction and Growth Facility, December, 2004.

bureaus, the differential between the official and parallel exchange rates closed to about 3 percent in 2004, indicating success in establishing market-determined rates.<sup>19</sup>

**Figure 3-7**

*Aid (percent of Gross National Income)*



On balance, though, the good news is meager. Burundi faces great challenges in stimulating export growth, and will have to rely heavily on foreign aid for years to come. Aggressive reforms are needed now to begin the long process of stimulating and diversifying exports, and improving the climate for attracting private foreign investment, so that the country can gradually reduce its vulnerability to commodity price shocks and its dependency on aid.

## ECONOMIC INFRASTRUCTURE

A country's physical infrastructure—for transportation, communications, power, and information technology—is the backbone for improving competitiveness and expanding productive capacity. In every respect, Burundi's infrastructure is in very poor condition, as expected for a country that has suffered through a prolonged civil war and where tensions continue. According to the interim PRSP (January 2004), a great deal of infrastructure was destroyed during the years of conflict, and an acute shortage of basic infrastructure services remains to support the productive sector. Constraints relating to water supply, energy transmission, transportation networks, and communication systems prohibit the growth of manufacturing even where value added is high.

<sup>19</sup> Calculations based on IMF, Burundi: First Review under the Three-Year Arrangement under the Poverty Reduction and Growth Facility, December, 2004. Figure 2, page 20.



Rural electrification is also an issue throughout the country; even in years of surplus harvest, the lack of facilities to preserve and process the crops leads to high spoilage losses, a high price to pay in a country that relies so heavily on agriculture for its livelihood.

Very few hard data are available for benchmarking the quality of Burundi's infrastructure. The Global Competitiveness Report, which is the main source for infrastructure indicators for this series of country reports, does not cover Burundi. Also not available are standard WDI data on electricity production and consumption, the rail network, and paved roads.<sup>20</sup> The absence of infrastructure data, in itself, is indicative of the fact that infrastructure has been largely neglected. The few figures that are available confirm the poor conditions. Looking at communications infrastructure, the telephone density in Burundi—12.4 lines per 1,000 people in 2003—is just a third of the average for LI Africa (37.9 lines), and well below the figure for Uganda (32.7 lines). Telephone density in Rwanda is also very low (16.4 lines), but still better than in Burundi. Nonetheless, the trend is positive; since the signing of the peace accords, telephone density has increased fourfold. The Internet infrastructure is also poorly developed. The country had just 2.0 Internet users per 1,000 people in 2003. This figure has risen steadily over the past few years but is still below LI Africa's average of 4.3 users per 1,000 people and the levels in Rwanda (3.1) and Uganda (4.9).

For Burundi's authorities and the donor community, the rehabilitation and expansion of market-supporting infrastructure and social infrastructure destroyed by the conflict is one of the foremost priorities for helping the country get on track for sustainable and equitable long-term growth.

---

<sup>20</sup> Although these are not standard indicators, they were considered due to lack of Global Competitiveness Report data.



## 4. Pro-Poor Growth Environment

Rapid growth is the most powerful and dependable instrument for poverty reduction, yet the link between growth and poverty is not mechanical. In some countries, the structure of development fosters income growth for poor households that is faster than overall per capita income growth, while in other settings growth benefits the non-poor disproportionately. A pro-poor growth environment stems from policies and institutions that improve opportunities and capabilities for the poor, while reducing their vulnerabilities. These characteristics are associated with improvements in primary health and education, the creation of jobs and income opportunities, the development of skills, micro-finance, agricultural development (for countries like Burundi with a large population of rural poor), and gender equality.<sup>1</sup> This section focuses on four of these issues that contribute to pro-poor growth: health; education; employment and the workforce; and agricultural development.

### HEALTH

The provision of basic health service is a major form of human capital investment and a significant determinant of economic growth and poverty reduction. Even though health programs do not fall under the EGAT bureau, an understanding of the health status of the population can influence the design of growth interventions.

Burundi's performance on health indicators is mixed: many indicators paint a dire picture, while others show a commitment to improvements. On the broadest indicator of health status, life expectancy, Burundi's performance is poor. For 2003, average life expectancy was just 41.6 years. This is similar to those of Rwanda (39.8 years) and Uganda (43.2 years), but well under the tragically low average for LI Africa (46.2 years), a region suffering from poverty and HIV/AIDS. The prevalence of poor health and premature death affects all aspects of the economy, including labor productivity, saving rates, the delivery of public services, and the education of future generations.

The prevalence of HIV/AIDS among adults in Burundi stood at 6.0 percent at 2003, exceeding all benchmarks (Figure 4-1, HIV Prevalence). The need to fight this pandemic is one of the main themes stressed in Burundi's interim PRSP. At the current prevalence rate, there is a high risk of

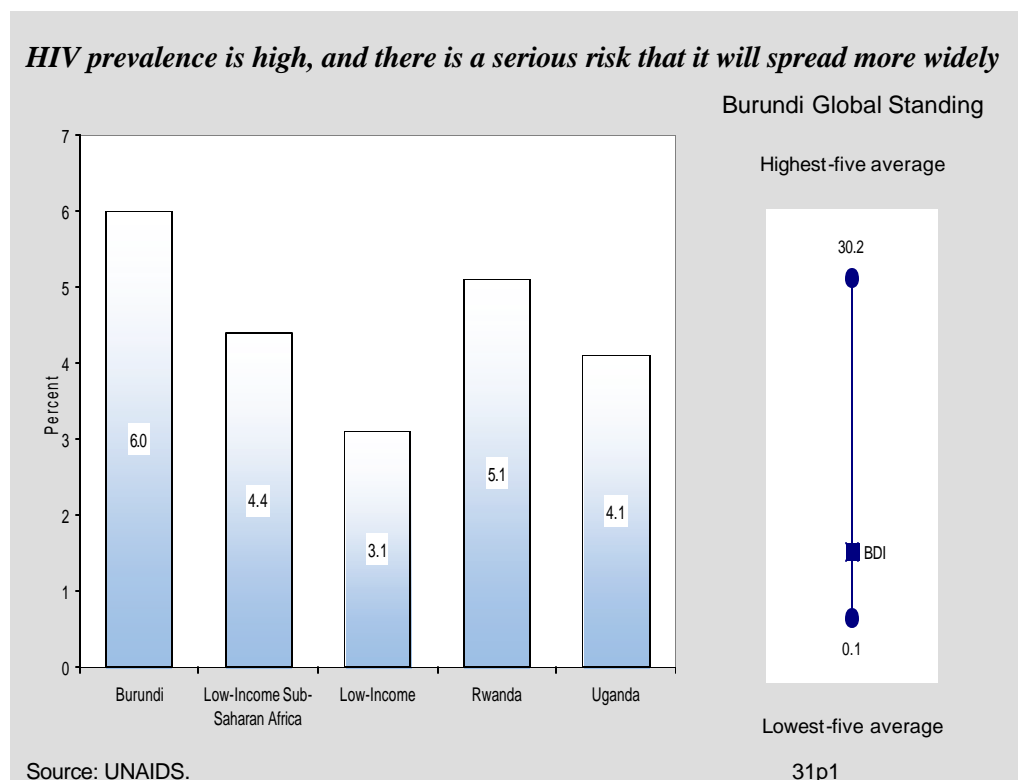
---

<sup>1</sup> Since this report focuses on economic growth performance, the template does not cover emergency relief or safety nets.

the virus spreading quickly through the population, especially as mobility is restored with the winding down of the conflict. If this were to happen, the associated economic burden would be enormous – for families, communities, businesses, government budgets, and the economy as a whole.

**Figure 4-1**

*HIV/AIDS Prevalence (percent)*



Another troubling indicator is the estimated maternal mortality rate (MMR): 1,000 deaths per 100,000 births. This is well above the average of 880 for LI Africa, which is also the figure for Uganda.<sup>2</sup> It is better, though, than the estimated MMR for Rwanda (1,400), as well as the regression benchmark for a country with Burundi's characteristics (1,210). The high incidence of undernutrition (see Poverty section) is likely to play a major role in maternal deaths, as is the lack of health personnel. The percentage of births attended by skilled health personnel (25.2 in 2002) is one of the lowest in the world. The ratio of government health expenditure to GDP has also been among the worst in the world; at an estimated 1.0 percent of GDP in 2004, health spending is less than half the average for LI Africa (2.1) and the standards achieved in Rwanda (3.2) and Uganda (2.1). Recalling that GDP is the lowest in the world, the paucity of public sector financing for health programs is even more glaring. At a minimum, the budget process should aim at increasing health expenditure to the regional average as a percentage of GDP, but strong

<sup>2</sup> UN Millennium Indicators Database states that the rate is based on the regression results, rather than actual figures.

donor support will be needed to make serious gains in health status. More fundamentally, a long period of rapid growth is needed to overcome budget constraints that hamper the health system.

Another sign of poor health is the high prevalence of child malnutrition, which was estimated at 45.1 percent in 2000 (latest data). This is significantly worse than the average for LI Africa (30.8), and the rates in Uganda and Rwanda, (24.3 and 22.9 percent, respectively). The poor nutrition status of children bolsters the urgency of donor support for programs to improve food security, income opportunities for poor households, and education programs for women.

Signs show, however, that the government is committed to achieving better health conditions. Access to improved water sources stood at 79.0 percent in 2002, above all the benchmarks. The child immunization rate of 74.5 percent is also commendable, given that the average for LI Africa is just 69.0 percent; nonetheless, it is well below the achievements in Rwanda (93 percent) and Uganda (81.5 percent).

## EDUCATION

Many of Burundi's education indicators are on par with regional benchmarks, and most show improvement, but far more resources will be needed for the country to reach a higher platform of human capital development. The net primary enrollment rate climbed from 44.7 percent in 1998 to 57.4 percent in 2002 (latest data). The latter figure is well above the regression benchmark for a country with Burundi's low level of income. Even so, it is below the LI Africa average of 64.3 percent and far inferior to Rwanda's achievement of 86.7 percent.<sup>3</sup> As discussed in the gender section, the gender disparity is large, with net enrollment rates of 52 percent and 62 percent for female and male children, respectively. Both figures, however, have risen rapidly in recent years. Though enrollment rates remain low, the persistence of students to grade 5 (total, male, and female) is better than the regional and country comparisons, although the latest data are from 2001. The *total* persistence rate is 67.5 percent, significantly above the regression benchmark of 57.1 percent.

As a legacy of low enrollment in prior years, youth literacy remains very low, at 66.1 percent in 2002 (latest data). By comparison, the youth literacy rate in Rwanda has reached 84.9 percent and in Uganda 80.2 percent. Here, too, there have been clear signs of improvement, with youth literacy rising from 61.5 to 66.1 percent in the five years to 2002. With rising enrollments and a high rate of persistence in school, the youth literacy rate should continue to rise steadily.

Even so, greater investment is needed in education if Burundi is to unlock the potential of its labor force (Figure 4-2, Primary Education Expenditure). At 1.3 percent of GDP, government expenditure on primary education falls short of the LI Africa average (2.0 percent), and the levels observed in Rwanda (1.8 percent) and Uganda (1.5 percent).<sup>4</sup> This low ratio, coupled with the extremely low and stagnant per capita GDP, signifies that government expenditure on primary education is insufficient. One must not be misled by data showing that expenditure per student as a percent of GDP per capita is high in Burundi relative to regional standards (for primary,

---

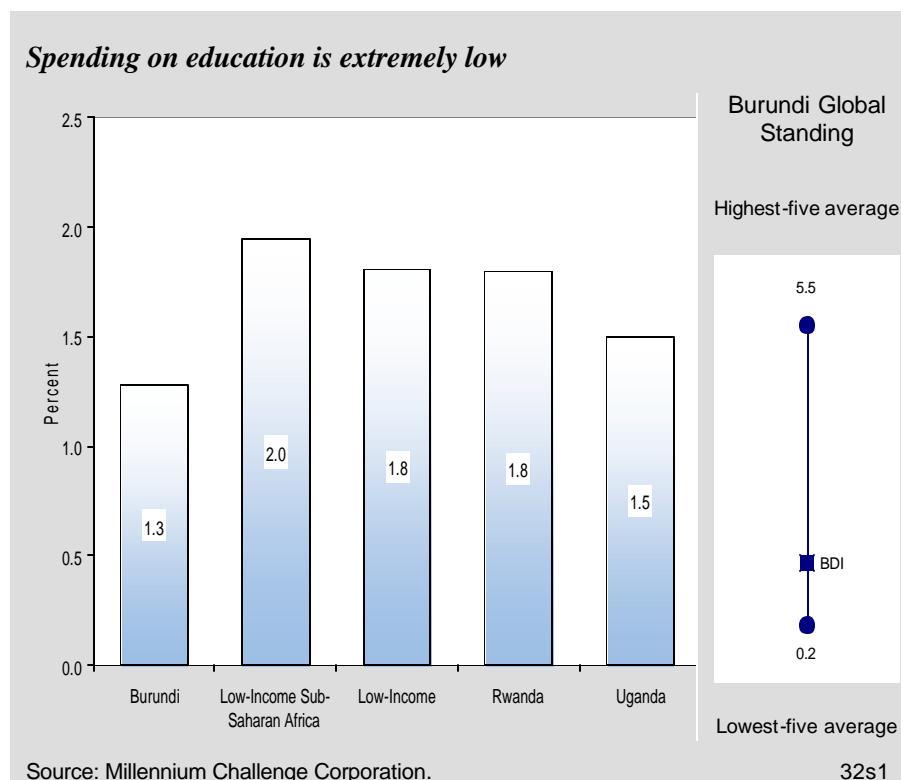
<sup>3</sup> UNESCO Institute for Statistics does not provide data on Uganda for this indicator.

<sup>4</sup> This is an MCA indicator.

secondary, and tertiary levels), because the base for this ratio—GDP per capita—is less than half the benchmark values and the number of students remains very low relative to the school age population.<sup>5</sup> The need to increase income levels is urgent to allow the government to provide adequate education and health services.

**Figure 4-2**

*Primary Education Expenditure (percent of GDP)*



The quality of education is also a concern, as suggested by the pupil-to-teacher ratio in primary schools, which stood at 49.9 pupils per teacher in 2002. This ratio is a bit higher than regional average of 46.9, but slightly better than the figures for Rwanda (59.9) and Uganda (52.7). Furthermore, the pupil-teacher ratio has fallen from 57.0 in 1998, perhaps indicating government commitment to improvement.

The bottom line is that education is a key to development. It results in a more productive labor force and creates a profound socioeconomic impact on families and on society as a whole. The educational system in Burundi needs to improve, especially in light of the country's youthful and growing population; to achieve this improvement, expenditure on education needs to rise. As for health, sustained donor support will be needed to help Burundi achieve more in education. As improvements in the quality and quantity of education contribute to economic growth, the

<sup>5</sup> Burundi's expenditure per student was 12.5 percent, 63.5 percent, and 545.5 percent of GDP per capita for primary, secondary, and tertiary, respectively. LI Africa's average expenditures were 11.8 percent, 33.0 percent, and 201.3 percent of GDP per capita.

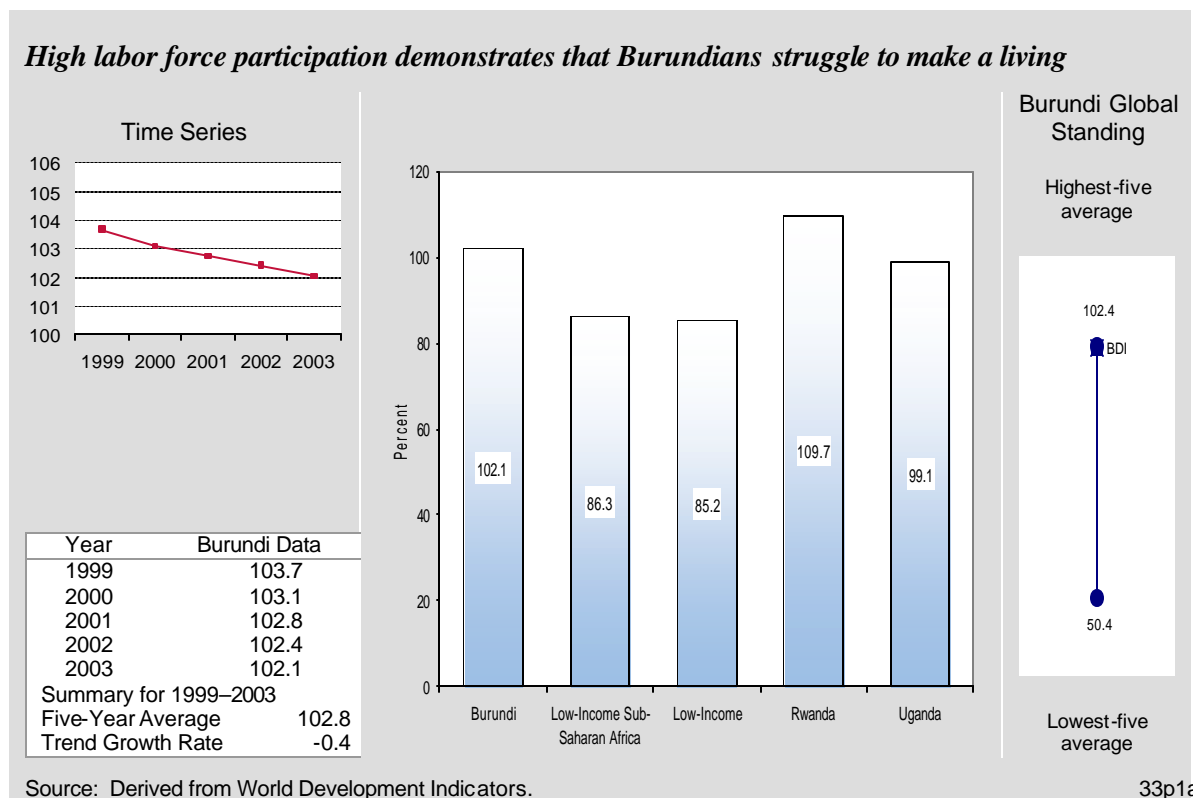
expanding economy will gradually relax the extreme resource constraint that fosters donor dependency, leading to a virtuous circle of development.

## EMPLOYMENT AND WORKFORCE

Burundi has one of the highest labor force participation rates in the world, at 102.1 percent in 2003 (Figure 4-3, Labor Force Participation Rate). The ratio of workers to working age population can exceed 100 percent only if many participants in the labor force fall outside the 15–64 age group. The figure for Burundi therefore suggests widespread reliance on child labor, as well as an immediate need for all able adults to work to support their families. The participation rate in Burundi is notably higher than the LI Africa average of 86.3, but comparable to Rwanda's and Uganda's levels of 109.7 percent and 99.1 percent, respectively. According to the interim PRSP (January 2004), heavy demographic pressure combined with the collapse of the agricultural sector during the conflict, a mismatch between jobs and skills, an unskilled labor force, and pervasive underemployment all lead to a situation where wage earners do not make enough to meet basic needs.

**Figure 4-3**

*Labor Force Participation Rate (Total)*



The labor force is growing at an estimated rate of 2.3 percent per year, resulting in the need to create jobs or income opportunities for roughly 90,000 workforce entrants per year. As noted in the interim PRSP, the labor market is struggling under demographic pressure, with a severe mismatch between skills and jobs, inadequate access to finance for many businesses, and rural

underemployment. Donor interventions are needed to improve the business-enabling environment, as well as for workforce development.

Job creation is also hindered by institutional impediments to hiring and firing. This can be seen in the World Bank's Rigidity of Employment index. A high value of the indicator suggests that the legal and regulatory environment impedes job creation and labor reallocation. On a scale ranging from 0 (minimum rigidity) to 100 (maximum rigidity), Burundi's score is 50 for 2004. While this is better than the regression benchmark of 56 and the average for LI Africa of 65, as well as Rwanda's exceedingly high score of 76, the degree of rigidity stands in stark contrast to Uganda's score of 7, indicating very flexible labor markets. Thus, Burundi's index value is very high by absolute standards, indicating that improvements in the regulatory environment are needed to facilitate job creation, increase productivity, and make Burundi's labor force more competitive.

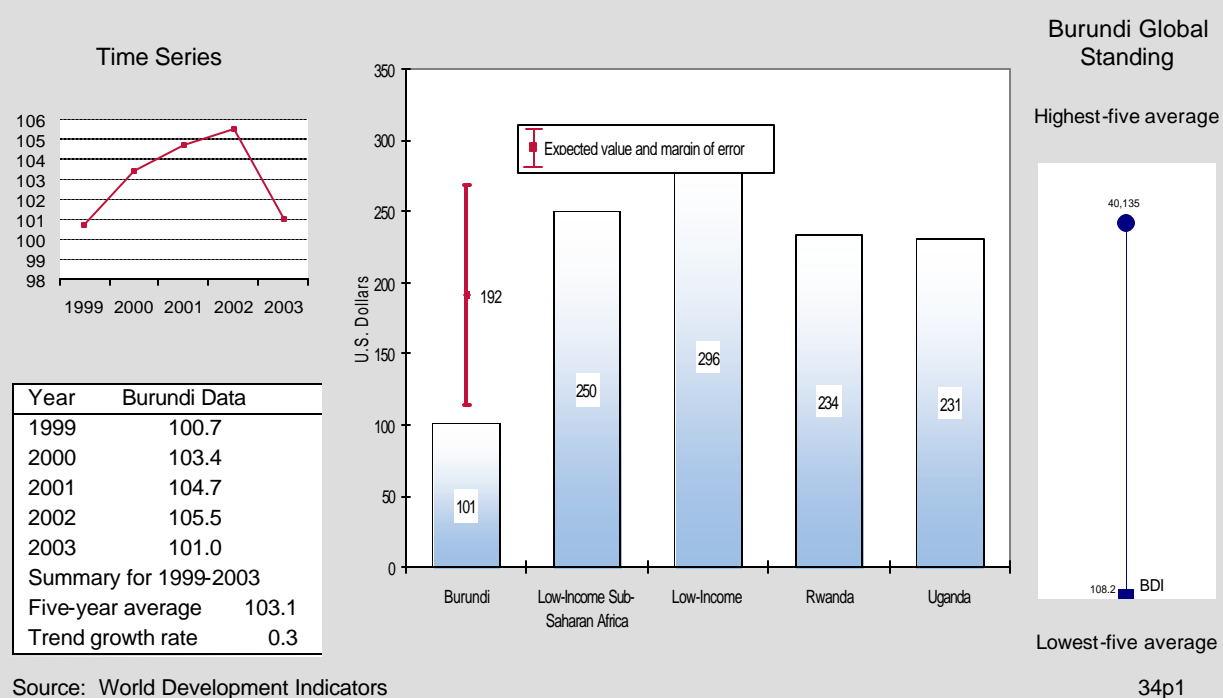
## AGRICULTURE

Burundi is an agricultural economy, so development of this sector is a critical determinant of growth and poverty reduction. For an estimated 94 percent of the labor force, agriculture was the main source of livelihood in 2001. Additionally, 49 percent of GDP and more than 93 percent of export earnings are attributed to agriculture.

The agricultural sector is highly vulnerable to shocks and generally performs poorly. The level of productivity per agricultural worker is one of the lowest in the world, averaging just \$103.1 (in constant 1995 US\$) over the five years to 2003 (Figure 4-4, Agriculture Value Added per Worker). This factor alone explains the high level of poverty. The productivity indicator shows that agriculture is exceedingly labor-intensive and is a result of the high population density. Subsistence farmers who lack the resources to buy inputs such as equipment, fertilizer, and high-quality seed drive the low productivity. The poor conditions can also be seen in the growth of agricultural value added, which averaged just 1.5 percent per year for the period 1999-2003. By comparison, the average for LI Africa is 4.2 percent. Rwanda (at 1.2 percent), and Uganda (at 2.3 percent) share with Burundi very low growth rates. The problems in agriculture are also evident in an index of crop production and a similar index of livestock production (both from the FAO). These indicators show that the production of crops and livestock has barely increased from the average levels attained in 1989-1991. On a positive note, cereal yields in Burundi (US\$1,329) are above the LI Africa average (1,063) and the figure for Rwanda (1,006), though far below that of Uganda (1,641).

Given the vital importance of agriculture to the economy and to the vast majority of poor Burundians, and the very poor performance of the sector, policy reform in this sector is critically need, as are programs to enhance agricultural productivity and expand income opportunities for the rural poor.



**Figure 4-4***Agriculture Value Added per Worker (constant 1995 US\$)****Value added per worker in agriculture is extremely low***



# Appendix. Indicator Criteria and Benchmarking Methodology

## CRITERIA FOR SELECTING INDICATORS

The scope of the paper is constrained by the availability of suitable indicators. Indicators have been chosen to balance the need for broad coverage and diagnostic value, on the one hand, and the need of brevity and clarity, on the other. The analysis covers 15 EG-related topics, and just over 100 variables. For the sake of brevity, the write-up in the text highlights issues for which the “dashboard lights” appear to be signaling problems, which suggest possible priorities for USAID intervention. The accompanying table provides a full list of the indicators examined for this report. A separate Data Supplement contains the complete data set for Burundi, including data for the benchmark comparisons, and technical notes for every indicator.

For each topic, the analysis begins with a screening of *primary performance indicators*. These “level I” indicators are selected to answer the question: Is the country performing well or not in this area? The set of primary indicators also includes descriptive variables such as per capita income, the poverty head count, and the age dependency rate.

In areas of weak performance, the analysis proceeds to review a limited set of *diagnostic supporting indicators*. These “level II” indicators provide more details about the problem or shed light on *why* the primary indicators may be weak. For example, if economic growth is poor, one can examine data on investment and productivity as diagnostic indicators. If a country performs poorly on educational achievement, as measured by the youth literacy rate, one can examine determinants such as expenditure on primary education, and the pupil-teacher ratio.<sup>41</sup>

The indicators have been selected on the basis of several criteria. Each one must be accessible through USAID’s Economic and Social Database or convenient public sources, particularly on the Internet. The indicators must be available for a large number of countries, including most USAID client states. The data must be sufficiently timely to support an assessment of country performance that is suitable for strategic planning purposes. Data quality is another consideration. For example, subjective survey responses are used only when actual measurements are not available. Aside from a few descriptive variables, the indicators must also be useful for diagnostic purposes. Preference is given to measures that are widely used, such as Millennium Development

---

<sup>41</sup> Deeper analysis of the topic using more detailed data (level III) is beyond the scope of papers in this series.

Goal indicators, or evaluation data used by the Millennium Challenge Corporation. Finally, an effort has been made to minimize redundancy. If different indicators provide similar information, preference is given to one that is simplest to understand. For example, both the Gini coefficient and the share of income accruing to the poorest 20 percent of households can be used to gauge income inequality. We use the income share because it is simpler, and more sensitive to changes.

## BENCHMARKING METHODOLOGY

Comparative benchmarking is the main tool used to evaluate each indicator. The analysis draws on several criteria, rather than a single mechanical rule. The starting point is a comparison of performance in Burundi relative to the average for countries in the same income group and region—in this case, low-income countries in Sub-Saharan Africa.<sup>42</sup> For added perspective, three other comparisons are examined: (1) the global average for this income group; (2) respective values for two comparator countries selected by the Burundi mission (Rwanda and Uganda); and (3) the average for the five best and five worst performing countries globally. Most comparisons are framed in terms of values for the latest year of data from available sources. Five-year trends are also taken into account if they shed light on the performance assessment.<sup>43</sup>

For selected variables, a second source of benchmark values uses statistical regression analysis to establish an expected value for the indicator, controlling for income and regional effects.<sup>44</sup> This approach has three advantages. First, the benchmark is customized to Burundi's specific level of income. Second, the comparison does not depend on the exact choice of reference group. Third, the methodology allows one to quantify the margin of error and establish a "normal band" for a country with Burundi's characteristics. An observed value falling outside this band on the side of poor performance signals a serious problem.<sup>45</sup>

Finally, where relevant, Burundi's performance is weighed against absolute standards. For example, the corruption perception index for Burundi was 2.1 in 2004. Regardless of the regional comparisons or regression results, this is a sign of serious economic governance problems.

---

<sup>42</sup> Income groups as defined by the World Bank for 2004. For this study, the average is defined in terms of the mean; future studies will use the median instead, because the values are not distorted by outliers.

<sup>43</sup> The five-year trends are computed by fitting a log-linear regression line through the data points. The alternative of computing average growth from the end points produces aberrant results when one or both of those points diverges from the underlying trend.

<sup>44</sup> This is a cross-sectional OLS regression using data for all developing countries. For any indicator,  $Y$ , the regression equation takes the form:  $Y$  (or  $\ln Y$ , as relevant) =  $a + b * \ln \text{PCI} + c * \text{Region} + \text{error}$ —where PCI is per capita income in PPP\$, and Region is a set of 0-1 dummy variables indicating the region in which each country is located. Once estimates are obtained for the parameters  $a$ ,  $b$  and  $c$ , the predicted value for Burundi is computed by plugging in Burundi-specific values for PCI and Region. Where applicable, the regression also controls for population size and petroleum exports (as a percentage of GDP).

<sup>45</sup> This report uses a margin of error of 0.66 times the standard error of estimate (adjusted for heteroskedasticity, where appropriate). With this value, 25% of the observations should fall outside the normal range on the side of poor performance (and 25% on the side of good performance). Some regressions produce a very large standard error, giving a "normal band" that is too wide to provide a discerning test of good or bad performance.

## LIST OF INDICATORS

	Level	MDG/MCA/EcGov <sup>a</sup>	CAS Indicator Code
<b>OVERVIEW OF THE ECONOMY</b>			
<b>Growth Performance</b>			
Per capita GDP, \$PPP	I		11P1
Per capita GDP, current US\$	I		11P2
Real GDP growth	I		11P3
Growth of labor productivity	II		11S1
Investment Productivity - Incremental Capital-Output Ratio (ICOR)	II		11S2
Gross fixed investment, % GDP	II		11S3
Gross fixed private investment, % GDP	II		11S4
<b>Poverty and Inequality</b>			
Human poverty index	I		12P1
Income-share, poorest 20%	I		12P2
Population living on less than \$1 PPP per day	I	MDG	12P3
Poverty headcount, by national poverty line	I	MDG	12P4
PRSP Status	I	EcGov	12P5
Population below minimum dietary energy consumption	II	MDG	12S1
Poverty gap at \$1 PPP a day	II		12S2
<b>Economic Structure</b>			
Labor force structure	I		13P1
Output structure	I		13P2
<b>Demography and Environment</b>			
Adult literacy rate	I		14P1
Age dependency rate	I		14P2
Environmental sustainable index	I		14P3
Population size and growth	I		14P4
Urbanization rate	I		14P5
<b>Gender</b>			
Adult literacy rate, ratio of male to female	I	MDG	15P1
Gross enrollment rate, all levels, ratio of male to female,	I	MDG	15P2
Life expectancy at birth, ratio of male to female	I		15P3
<b>PRIVATE SECTOR ENABLING ENVIRONMENT</b>			
<b>Fiscal and Monetary Policy</b>			
Govt. expenditure, % GDP	I	EcGov	21P1
Govt. revenue, % GDP	I	EcGov	21P2
Growth in the money supply	I	EcGov	21P3
Inflation rate	I	MCA	21P4
Overall govt. budget balance, including grants, % GDP	I	EcGov	21P5
Composition of govt. expenditure	II		21S1
Composition of govt. revenue	II		21S2
Composition of money supply growth	II		21S3

	Level	MDG/MCA/EcGov <sup>a</sup>	CAS Indicator Code
<b>Business Environment</b>			
Corruption perception index	I	EcGov	22P1
Doing business composite index	I	EcGov	22P2
Rule of law index	I	MCA / EcGov	22P3
Cost of starting a business, % GNI per capita	II	EcGov	22S1
Procedures to enforce contract	II	EcGov	22S2
Procedures to register property	II	EcGov	22S3
Procedures to start a business	II	EcGov	22S4
Time to enforce a contract	II	EcGov	22S5
Time to register property	II	EcGov	22S6
Time to start a business	II	EcGov	22S7
<b>Financial Sector</b>			
Domestic credit to private sector, % GDP	I		23P1
Interest rate spread	I		23P2
Money supply, % GDP	I		23P3
Stock market capitalization rate, % of GDP	I		23P4
Cost to create collateral	II		23S1
Country credit rating	II	MCA	23S2
Legal rights of borrowers and lenders index	II		23S3
Real Interest rate	I		23S4
<b>External Sector</b>			
Aid , % GNI	I		24P1
Current account balance, % GDP	I		24P2
Debt service ratio, % exports	I	MDG	24P3
Export growth of goods and services	I		24P4
Foreign direct investment, % GDP	I		24P5
Gross international reserves, months of imports	I	EcGov	24P6
Gross Private capital inflows, % GDP	I		24P7
Present value of debt, % GNI	I		24P8
Remittance receipts, % exports	I		24P9
Trade, % GDP	I		24P10
Concentration of Exports	II		24S1
Inward FDI Potential Index	II		24S2
Net barter terms of trade	II		24S3
Real effective exchange rate (REER)	II	EcGov	24S4
Structure of merchandise exports	II		24S5
Trade policy index	II	MCA / EcGov	24S6
<b>Economic Infrastructure</b>			
Internet users per 1000 people	I	MDG	25P1
Overall infrastructure quality	I	EcGov	25P2
Telephone density, fixed line and mobile	I	MDG	25P3
Quality of infrastructure – railroads, ports, air transport , and electricity	II		25S1
Telephone cost, average local call	II		25S2
<b>Science and Technology</b>			
Expenditure for R&D, % GNI	I		26P1

	Level	MDG/MCA/EcGov <sup>a</sup>	CAS Indicator Code
FDI and technology transfer index	I		26P2
Patent applications filed by residents	I		26P3
<b>PRO-POOR GROWTH ENVIRONMENT</b>			
<b>Health</b>			
HIV prevalence	I		31P1
Life expectancy at birth	I		31P2
Maternal mortality rate	I	MDG	31P3
Access to improved sanitation	II	MDG	31S1
Access to improved water source	II	MDG	31S2
Births attended by skilled health personnel	II	MDG	31S3
Child immunization rate	II		31S4
Prevalence of child malnutrition (weight for age)	II		31S5
Public health expenditure, % GDP	II	EcGov	31S6
<b>Education</b>			
Net primary enrollment rate	I	MDG	32P1
Persistence in school to grade 5	I	MDG	32P2
Youth literacy rate	I		32P3
Education expenditure, primary, % GDP	II	MCA/ EcGov	32S1
Expenditure per student, % GDP per capita – primary, secondary, and tertiary	II	EcGov	32S2
Pupil-teacher ratio, primary school	II		32S3
<b>Employment &amp; Workforce</b>			
Labor force participation rate, females, males, total	I		33P1
Rigidity of employment index	I	EcGov	33P2
Size and growth of the labor force	I		33P3
Unemployment rate	I		33P4
<b>Agriculture</b>			
Agriculture value added per worker	I		34P1
Cereal yield	I		34P2
Growth in agricultural value-added	I		34P3
Agricultural policy costs index	II	EcGov	34S1
Crop production index	II		34S2
Livestock production index	II		34S3

<sup>a</sup> Level I = primary performance indicators, Level II = supporting diagnostic indicators

MDG = Millennium Development Goal indicator

MCA = Millennium Challenge Account indicator

EcGov = Major indicators of *Economic Governance*, which is defined in USAID's *Strategic Management Interim Guidance* to include "microeconomic and macroeconomic policy and institutional frameworks and operations for economic stability, efficiency, and growth." The term therefore encompasses indicators of fiscal and monetary management, trade and exchange rate policy, legal and regulatory systems affecting the business environment, infrastructure quality, and budget allocations.